RADIO-PERCEPTION

THE JOURNAL OF THE
BRITISH SOCIETY OF DOWSERS

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JOURNAL OF THE
BRITISH SOCIETY OF DOWSERS

Vol. X No. 73 September, 1951

NOTICES

The "Proceedings" of the Scientific and Technical Congress on Radionics and Radiesthesia held last year can be obtained from Colonel A. H. Bell, York House, Portugal Street, London, W.C.2, price 7/6 post free.

* * * *

The book by Mr. V. D. Wethered, B.Sc., entitled *A Radiesthetic Approach to Health and Homoepathy* or *Health and the Pendulum*, is now available, price 10/6 to non-members and 8/6 to members.

* * * *

The following books are also published by the Society :—
Dowsing, by Captain W. H. Trinder, 10/- (7/6 to members)
Radiations, by T. Bedford Franklin, M.A., F.R.S.E., 8/6

* * * *

The following books have been added to the library :—

Radiations des Formes et Cancer ..	Enel	150 pages
L'Homéopathie Radiesthésique	Doux	98 pages
Joseph Treyve	Laval	46 pages

* * * *

The following periodicals are now received in exchange for *Radio-Perception* :—

Revue Internationale de Radiesthésie
Radiesthésie pour Tous
Bulletin de la Confédération Française de la Radiesthésie
Rivista Italiana di Radiestesia
Zeitschrift für Radiästhesie

Journal of the Society for Psychical Research
Orgone Energy Bulletin
Atlantis
Prediction
Two Worlds
Health and Life

* * * *

The following one inch sheets of the Geological Survey can now be obtained from Edward Stanford, 12-14 Long Acre, London, W.C.2, at 5/- per sheet in addition to those shown on pages 233 and 305 of *B.S.D.J.*, IX :—

No.			*No.*		
70	Leeds, drift and solid		286	Reigate,	drift
75	Preston,	drift	290	Dover,	,,
84	Wigan,	,,	298	Salisbury	,,
121	Wrexham,	,,	313	Shaftesbury,	,,
187	Huntingdon,	,,	346	Newquay,	,,
206	Sudbury,	,,	347	Bodmin,	,,
207	Ipswich	,,	352	Falmouth,	,,
272	Chatham	,,			

Also a Memoir, *Geology of the District, N. and E. of Leeds* for 7/6.

* * * *

Contributions for the Journal, preferably in typescript, should be sent to the Editor at least five weeks before the first day of March, June, September and December, if they are to appear in the respective *Journals* for those months.

* * * *

The price of new *Journals* to members, in excess of the free number, and of old *Journals*, is 2/- and 1/6 respectively.

Six free copies of the *Journal* will be given, on request, to writers of articles in it, in addition to the usual copy.

* * * *

The Society's badges can be obtained from the Honorary Secretary for 1/3 post free.

* * * *

Communications for the Editor, and inquiries, should be sent to Colonel A. H. Bell, York House, Portugal Street, London, W.C.2.

L'ABBE ALEXIS BOULY

PART ONE

A MASTER OF RADIESTHESIA SPEAKS

Translated from an article in La Revue Internationale de Radiesthésie *and reproduced by permission of the Editor*

At the urgent request of his friend and colleague, M. Emile Christophe, M. l'Abbé Bouly, the venerated pioneer of Radiesthesia (the word he invented), consented to send him—for the benefit of the readers of *R.I.R.*, who express their lively gratitude—his photograph and a few hastily written but precious notes. They reveal alike the truly scientific outlook and the extreme modesty of their illustrious author, who has always shown himself keenly opposed to any kind of vain publicity and entirely indifferent to applause.

Start of my career

In June, 1913, the year of the first *Congrès des Sourciers*, a family, the father of which was the son of an illustrious member of the Academy of Sciences, arrived from the Ardennes to pass the summer at Hardelot.

At that time there were few people to be seen on our little sea-front, so we often had the opportunity of chatting together, for he was a good talker and I liked his conversation. One day the conversation turned on the art of dowsing. Since my earliest childhood I had always wanted to be a dowser; I am of peasant stock, and I love the water, the earth and the trees. I believed in that mysterious gift which is possessed by certain people, but that day I pretended to be a sceptic. I said to him, "You will never make me believe that water can be found 50 metres down, that one can say where it comes from, where it is going, what its yield is, its depth and its quality. No, I don't believe it." All the same, I did believe in it a little, but I wanted to know what he thought. "But, M. le Curé," he said, "I assure you there are some people who can do all that, and if you like I will show you how they work; I am an amateur dowser myself." I had found my man, but I did not keep him.

Several days passed, and by I know not what chain of circumstances we did not meet again until one evening I learnt that he was about to leave Hardelot. I went to his house and said, "Sir, you have told me something which interests me enormously; you said you could find water by means of a rod. I am going to build a presbytery where water will be wanted; come and show me the place to dig a well."

And so we set out, and on the way he cut a small fork-shaped rod from a hedge. Arrived at my garden, he grasped it firmly in both hands, point foremost, and started to walk. In a moment the rod turned up; he had hit on a water point. He then put the rod in my hands and, elbows at side, I moved off in the direction he had already taken. At the same place where the

rod had moved in his hands it moved in mine also, but more violently. "But you, too, are a dowser, M. le Curé," he said. I was indeed a dowser without having known it.

The Dowser

Starting from that day I practised assiduously, for practice makes the senses keener. Is the dowser's aptitude due to a sixth sense? Or is it not rather the development by practice of one of the other five?

I soon became well known, and was much sought after when wells were to be made, particularly during the dry years of 1920, '21 and '22. The papers advertised me by publishing, without my knowledge, my results in the discovery of subterranean waters, the foundations of old and forgotten strongholds, ancient cemeteries and buried treasures. Industry on a large scale applied to me for abundant supplies of non-calcareous water which could only be found at great depths, for instance for the Devaux at St. Amand, where I located a spring at 80 metres which rose 2m.50 above the surface with a yield of 75 cubic metres (16,500 gallons) per hour; at Bury, near Soissons, for the "Distilleries du Soissonais," where I made them go down to 625 metres to get 500 cubic metres (110,400 gallons) per hour rising 2.50 metres above the surface, with a salinity of 3, and there we were in the chalk.

Finding ordinary water is easy, but to find the water one wants is not within the power of everyone. This can only be done by using a "sample."

It was this faculty of being able to find water of a certain quality which prompted my journey to the Canary Islands. The Canaries are a Spanish possession in Africa between Morocco and Senegal. The country would be the most fertile in the world if the water were not saline, but it hardly ever rains there. When I went there for the first time in 1928, it had not rained for four years. But when I set foot on the island of Fuerteventura, floods of water fell such as I had never seen. The papers had announced my arrival and the falling of avalanches of water coinciding with my landing astounded the inhabitants to such an extent that they almost regarded me as a supernatural being able to call forth water from the sky as well as to make it rise from the earth. I can assure you that they thought a lot of me.

I went three times to the Canary Islands to find non-saline water, as the cultivation of the banana does not admit of more than one per cent. of salt and that of the tomato 3 per cent. I found it at a depth of 100 metres; it is still being exploited, and brings wealth to the proprietors. Roumania, Poland, Spain, Portugal, Belgium and the whole of France have seen my efforts in the search for beneficent waters of qualities suitable to the needs of particular industries.

Hundreds of wells, I might say thousands, owe their origin to me. It is true that I started at the age of 47 and am now 86. As a seaside Curé I had much leisure; outside the season, which lasts from three to four months, all my spare time from October to Easter was dedicated to the search for water and minerals. Every week I went to Giromagny, near Belfort, to show the miners the direction they should take to reach the threads of silver-bearing lead, or again to the Central Plateau in the Côte d'Azur for the same mineral or others like it.

After the Armistice of 1918, the Ministry of War summoned me to the Camp de Sissonne to pass an examination before General Régnier and two Commandants, Blochme and St. Sauveur. The soldiers had hidden shells and pieces of shells in the ground, and I had to find out what kind of shells they were—German, Austrian or French—and what the fragments were. I made no mistakes, and the General, in view of this result, warned me that if he were asked by the Ministry how to find shells buried in the ground, he would say "Apply to the Abbé Bouly." A week later I had a request from the "Récupération Russe" of the district of Arras, and week by week I went there specially to discover unexploded shells. Three hundred soldiers of Wrangel's army with a Russian general at their head worked under my direction, and I was myself accompanied by a Captain of Engineers of Douai, Carton by name, now, I think, a Colonel, as representing the Government.

I still have in my drawing-room an old earthenware jug which I brought back from a prospection near Dax, where I had been told of the possible existence of treasure in an old house. Amongst the jugs, there were six full of 5-franc pieces below the pavement under the staircase. All these finds represent but part of my labours. They were easily done by using the two methods of the "solar plane" and the "sample," the one puts me in resonance and the other enables me to identify the object of search.

Method of working

By the lectures I have given in Belgium and in all the large towns of France, I have contributed to the diffusion of the art of Radiesthesia. The word itself is due to me. It expresses the perception by some sense or other of the mysterious waves which emanate from a body on which light falls, especially sunlight. The solar plane is this: Between sunrise and sunset, everything here below is in a state of vibration, the waves of which are directed towards the sun; consequently, if you want to know where the object of your search is to be found you pass with your rod or pendulum between the place where you are working (if you have reason to believe that your objective is near there) and the sun; the reaction of the rod will occur if the object is really there, and you will only have to follow the ray coming from it which is like a line stretched between it and the sun.

As for the sample, it is a specimen of a similar nature to what you are seeking; the object and the sample have the same wavelength. Passing between them, the rod reacts.

Well-meaning people believe that Radiesthesia is an occult science, but it has no connection with occultism; it is " wireless " applied to waves emanating from objects affected by light. Wireless picks up sound waves and even light waves; Radiesthesia picks up waves from material objects and indicates their nature, the operator acting as a relay, the object as an emitter and the sample as a receiving station.

The start of Medical Radiesthesia

It remains for me to say a word about work on microbes. As Founder and first President of the Society of the Friends of Radiesthesia I had to put forward subjects for the associates to study. I had explored the radiations from underground water, metals and minerals. What new line could I take? A boundless field lay before me, the world of microbic vibrations. I was bold enough to tackle it, but to start with I had to learn something about microbes, to study their nature and their influence on the human body.

Every week I went to Lille to work at the Faculty of Medicine under the direction of Dr. Delassus, at that time Dean of the Faculty. Every week, too, I worked in the hospitals at Boulogne and at Berck with the help and approval of the doctors, who were keenly interested in these microbic researches. At Liége, a university town in Belgium, I carried out some sensational experiments before the Professors, which were highly successful and were much written up in the papers of that time. At the hospital of San Jose in Las Palmas, I carried out diagnoses without a mistake on each of the patients, who were brought to me lying on a bed and covered up to the chin. In short, I was ready to receive patients. They came in large numbers and the syndicate of doctors and chemists raised no objection. Everyone knew I was not working to compete with the doctors but was following a scientific end. My object achieved, I shut my door and handed over to my practice to one of my pupils, a Doctor of Medicine and excellent radiesthetist, and above all a tenacious investigator.

Indirect Recognition of Radiesthesia

During my studies and investigations I had reason to congratulate myself on the goodwill always shown me by those who could in any way assist my efforts and from whom I drew the " essential marrow " as Montaigne called it, and them I heartily thank.

In the Government of the Republic I found support and continuous encouragement and it has been generous in its marks of esteem.

In 1927 I was nominated *Officier d' Académie*
1935 *Officier du Mérite Agricole*
1939 *Officier de l'Ordre Intellectuel et Social*
1949 *Croix d' Honneur*
1950 *Chevalier de la Légion d' Honneur*

This last distinction is the highest decoration the Government could award me. In my person this Cross of the Legion of Honour applies to all our Radiesthetic Societies and this red ribbon should also find its true place on the breast of many of our workers, collaborators from the first to the latest hour and all deserving of commendation.

For my own part this title of legionary is the crown of a whole life dedicated to the service of God and the good of Humanity.

NOTE.—The Abbé Alexis Bouly was born at Condette (Pas-de-Calais) on December 11th, 1865; primary education in the village school; secondary at the Little Seminary of Boulogne-sur-Mer; bachelor's degree; higher education at the Grand Seminary of Arras, then at the Sorbonne, England, Germany; Professor, then *Supérieur de Collége*. Curé of Hardelot.

DIVINING ROD

BY KAYE STARBIRD

The willow branch that points the hidden pool
Under the shallow root or under rock
Will never tug the fingers of a fool
Or bend the wrist of one who comes to mock.
The noisy skeptic, with his alien drill,
May probe the earth a fruitless month of hours
Only to see an old man stroll a hill
And find the source that springs beneath the flowers.
If there is knowledge in a willow bough,
You cannot grasp it with a doubting hand,
For it requires a simple man, somehow,
To trust a truth he does not understand,
And often only blind belief will bring
The sightless footsteps to the buried spring.

From *The New Yorker*, by permission.

THE SUBCONSCIOUS MIND AND THE DOWSING EFFECT

Note of an address given to the British Society of Dowsers on May 17th, 1951

BY R. C. THORNTON, D.Sc., PH.D.

Most of you know of the work that has been done on the physical components of dowsing phenomena. Work of members of this Society and others has demonstrated conclusively that

the dowsing effect can be sub-divided into at least two components :—

1. There is a physical radiation of some nature from the object of search, whether it be mineral or organic, living or dead.
2. There is a physiological reaction in the dowser's organism by means of which the presence of the radiating object is recorded.

It has been fully demonstrated by many experimenters that in every dowsing effect both of these components must be present before any results are obtained.

Physical Radiation—Physiological Reaction

Let us consider these components separately.

1. *Physical Radiation*

You all know of Mr. Maby's work on this subject, which was treated of thoroughly both in his lecture to the Congress of Radionics and Radiesthesia in May of last year, and in an expanded form in his talk to the Psychosomatic Research Association in April of this year.

In the discussion following his Congress lecture, Mr. Maby stated that it seemed to be fairly evident that beams of electrons on the one hand and Hertzian and gamma ray components on the other were responsible for most of the phenomena. He was of the opinion that there were therefore various differing components of "dowsing rays," and that in physical observations and experimentation, the phenomena detected had all the main characteristics of electromagnetic radiation.

Professor Tromp in his book, *Psychical Physics*, has advanced the view that the conclusions of Maby and Franklin are too narrow, but he does admit that much of the ground from the purely physical, as against the physiological, standpoint had been well covered in the book by Maby and Franklin, *The Physics of the Divining Rod.*

The problem of the physical radiation was approached from another standpoint by Dr. Brunler. He stated his theory of the "dielectric" component of all radiation in an address to this Society in October, 1946. His idea is that there is a component inseparable from the electromagnetic in all types of radiation. This he calls "dielectric" and it is probably closely related to Mr. Macbeth's radiesthetic theory of electricity types.

It is also fairly reasonable to assume that both Brunler and Macbeth are stating in other terms the theory of the etheric wave radiation specific to different materials and the flow-field, or radionic radiation from matter in motion (e.g., water), formulated by Maby.

Finally, in connection with the physical radiation, I would refer you to Mr. de la Warr's lecture to the Congress, in which

he stated his theory of the complex wave-form and propounded the physical laws apposite to it.

2. *Physiological Reaction*

It is pretty well accepted among the workers in this field that the physiological reaction takes the form of a neuro-muscular reflex. Electric charges from the air may be transferred to the skin and thence by this mechanism back to the dowsing rod. The whole reaction does not take more than a thousandth part of a second!

Now we come to a difficulty. These two components, physical and physiological, do provide an adequate mechanism for the detection of an object of search.

OBJECT—RADIATION→STIMULATION→
NEURO-MUSCULAR REFLEX—DOWSING EFFECT

But—and it is a big BUT—this does not adequately explain a number of disturbing factors:—

1. Why are some dowsers "positives" and some "negatives"? The neuro-muscular mechanism is sufficiently similar in every human being.

2. Why the differing results in estimating reaction-bands, &c.? It is a pure stimulus-response; why is there any variation?

3. How is it that a dowser is able to be selective—why is he able to find only what he sets out to find? Are his neuro-muscular reactions so hyperfine that they can make infinitesimal differentiations? I know that dowsers *can* make differentiations but not to the extent required by empirical reasoning.

Let us first, in elucidating the problem, deal with differing results. There are no well-defined data of dowsing reactions. Each dowser has to rely on his own ability and sensitivity and, if he is to use any yardsticks, they cannot be solid evidence of exact results—such as the solution of a mathematical problem or equation—they can only be the findings of others, each of which must be considered to be of equal validity.

We have a clue here. The mechanism of learning tells us a lot about this. Let us have a look at the phenomena of learning and memory. The association areas of the brain are responsible for learning. You probably know of the theory of brain-traces, and how they are responsible for memory. But it is known that brain-traces outlast conscious memory and the memories become latent, or, as psychologists say, subconscious. Subsequent re-stimulation brings memory back quickly. Think how easy it is to re-learn a poem once learnt and then forgotten!

First learning of any subject leads to the formation of traces, and if a thing is once learnt wrongly it will persist in being re-presented to consciousness wrongly, despite conscious reasoning. If, therefore, in learning a new art—and dowsing is an art—

a thing is learnt a certain way, it persists in returning to consciousness that way. If there is a preliminary identification or original assumption, all subsequent re-stimulation is coloured by the original assumption, preserved in the subconscious mind.

This could explain the varying results of dowsers—for each varying result is equally valid as far as perception is concerned. The matrix is there; it is what the interpretative mechanism does to it in detecting it that is the variable. In dowsing results, therefore, all that differs is the perceptual and interpretative function, coloured by subconscious re-stimulation.

Let us see what are the further ramifications of the subconscious mind. First of all, let us try to agree what the subconscious mind really *is*. To the psychoanalysts it is the product of repression. In the infant, they say, there is no dualism of conscious and subconscious, but the process of repression begins as soon as he encounters the disapproval of adults to certain of his actions and feelings. But this, with deference to the psychoanalysts, is only half the story. It is equally as valid to postulate that the conscious mind *arises from* the subconscious, thus leaving a vast substratum. I know that repressions are contained in the subconscious, but I believe that these are intruders which should be conscious but are forcibly pushed down.

. It is known to psychoanalysts that racial and ancestral memories are embedded in the subconscious (e.g., instincts) and you will remember Guy Underwood's articles in the Journal of this Society, "Archæology and Dowsing." It would be interesting to know if his experiments with ancient monoliths, temples and roads provide evidence of a generally forgotten perceptive faculty once common amongst our ancestors and now capable of being evoked from the ancestral (subconscious) records and re-stimulated. And even here it is noticeable that different dowsers will find evidence in track-lies, cardioids, &c., of differing detail but with underlying basic similarity of phenomena.

To revert to our analysis of the subconscious mind, we have to agree that there is an *energy-drive*. This is responsible for the power of a neurotic tendency. The word most commonly used by psychiatrists today to refer to the original sphere of subconscious (e.g., instinctual) activity is *Id*, a term first used by Freud. This signifies the reservoir of psychic energy. We may well ask "What is this energy?" A few clues have been unearthed by neurologists and anatomists which seem to corroborate the thesis of the earlier psychologists that the seat of subconscious energy is the solar plexus.

First is the evidence provided by examination of bundles of nerve fibres in persons who have died as a result of accidents. In cases of lesion caused by the accident, it has been found that

cut fibres atrophy and disintegrate rapidly, and a number of nerve specialists have confirmed that association-tracks referring to instinct-motivation are connected with branches from the solar plexus.

Then there is the psychosomatic corroboration of this in the accompaniment to several types of psychoneurosis of digestive and nervous intestinal disorders, especially when of instinctual origin.

Those who attended my talk to this Society in June, 1950, will remember that I spoke of the latest theories of psychokinesis (PK)—the power of moving matter at a distance without material agency) and telepathy and the belief that physical radiation from the brain was responsible. It is known from experiment that PK is more successful, not as may be expected when the subject is concentrating hard on the object, but when he has dissociated his conscious faculties from the object. This would point again to the power of the subconscious drive. The nature of this radiation is of course not yet fully known, but Maby, as you probably know, has proved with his detectors the existence of short electric waves emitted by human beings (cf. Cazzamalli). It is possible that these originate in the solar plexus and are of a normal rhythmic nature except under stress when they become arrhythmic. The interesting point is that screening the solar plexus with perspex or lead sheet, or some such screening device, seems to blanket these waves.

It is probable in hypnosis that a state of resonance is obtained between the practitioner and the subject, and then by a process of conscious mental *modulation*, patterns are imposed on the subconscious of the subject which are faithfully responded to. Although speech is usually employed in hypnosis, many experimenters have reported a high degree of success in the transmission of *unspoken* commands. These reach consciousness in the subjct at the appropriate stage, or remain fully automatic (subconscious) if obeyed in the hypnotic state.

There is a fruitful field of research here; to find out how far the skilled dowser modulates, by *mental selection*, his own psycho-radiant energies in order to tune in to (or resonate with) the appropriate stimulus.

To sum up, there are three ways in which the subconscious mind can affect dowsing phenomena :—

1. Learning process and re-stimulation as it affects the interpretative ability.
2. Recall of ancestral perceptive powers—a faculty I believe most dowsers to possess.
3. Modulation of psycho-radiant energy and the obtaining of resonance with the radiation sought for, by selection.

THE CONTRIBUTION OF DOWSING TOWARDS NEW ASPECTS OF SCIENCE

Notes of an Address given to the British Society of Dowsers on June 13th, 1951

BY W. E. ARNOULD-TAYLOR, D.Sc., F.PHYS.SOC., F.F.Sc.

I have for some weeks now regretted my rashness in succumbing to your President's invitation to give this lecture—a regret born of a healthy dislike of those who with incomplete knowledge of a subject presume to teach others. In fact I am reminded of the late Bernard Shaw, who once said " he who can does—he who can't teaches." In order therefore to avoid any misconceptions may I say that there are many aspects of the phenomena called " Dowsing " about which I know very little. This lack of experience does not however prevent a trained analytical mind from making a critical evaluation of the contribution of one science to science in general. Because one has been trained to observe, check, and above all to ruthlessly discard those things one would like to be but aren't, does not mean ipso facto that one knows or can find all the answers. In fact I am deeply conscious of my own inability to perform this very act. The more I meet with people of wide experience the more I am prepared to sit at their feet and learn. It is therefore with a sincere sense of humility that I come before an audience of experts to put a point of view which may run counter to that laid down in your text books. Though you may disagree with with me (and I believe you will) I hope you will find this new point of view provocative of thought.

The text of my talk is not meant to be ambiguous for I believe and will seek to shew that Dowsers have made a very valuable contribution to the general advancement of science in two ways :—

1. Specific addition to the sum total of knowledge from the radiative field, and

2. The conditioning of scientific thought by a distinctive philosophy.

Dealing with the first point the most notable contribution has been the divining rod and pendulum as a means of detecting radiations. I do not think that the science of its operation has always been accurately described—but that doesn't alter its value. I don't believe that its swing is due basically to a reflex action. To check this I constructed a metal stand on a solid wood base with a pendulum hanging from the centre —the only human contact being a finger placed on the metallic

stand to act as an earth. Apart from a diminution in the power of the swing I found reaction in the same places and distances as when held in the hand.

It then occurred to me that if the radiations were of an electromagnetic nature their detection must be influenced by the dielectric constant of the material of which the pendulum was manufactured. From this I argued that a dielectric loss-free material should give a more powerful swing and accordingly had a perspex pendulum constructed. This certainly reacted more quickly and strongly in my hands and I would like some experienced dowser to try it. (At this point the pendulum was tried by a member—Mr. Wethered—with similar results). I then tried to alter the electromagnetic field by the introduction of an oscillator operating in the frequency range 100,000 c.s., with the effect that it stopped the pendulum.

I venture to suggest that these considerations lend strength to my argument that the radiations are not picked up by the operator and translated by reflex action into a pendulum swing, but that the pendulum itself is affected by the radiations and that the part of the operator is that of suitable earthing material.

Protagonists in this field, notably Rogers, Ash and Brunler, have for some years insisted that these radiations are from the supersonic part of the electromagnetic spectrum, and you are all well aware of the experiments of Ash and Brunler on the irradiation of seeds. To support this theory I would mention the work of Professor Wallace at Connecticut University, who found that hybrid corn subjected to a supersonic field produced a yield 15 per cent. greater than untreated seeds.

Another contribution of Dowsers has been their insistence on the value of small radiations at a time when wave amplitude was considered all important. Despite the general acceptance in the early part of this century of the concept that more and more power was required to increase penetrability (e.g., a few volts to give light but thousands for X-Ray) Dowsers held to the view that waves of very small amplitude but tremendous number of oscillations were much more valuable. We are now seeing this view confirmed in radar, short wave heating, &c.

It has long been held that dogs trained to trace people or things do so by the picking up of particle scent, yet it is obvious that the Dowser doing the same act must do so by an entirely different process. In point of fact I do not think that dogs do this particular form of detection by particle smell but by a sensitivity to radiations. In support of this I would advance the following considerations :—

1. Dogs can detect long after it is reasonable to suppose that particles remain.

2. They can do it over long distances.

3. They do not necessarily cover the same course as the person.

4. They use the same methods as Dowsers in that they "scent" clothing or articles belonging to the wanted person.

However, valuable as these contributions are they are less important in my opinion than the distinctive philosophy employed and enjoyed by Dowsers. This includes an innate knowledge of rightness despite any pronouncements of science to the contrary, and a knowledge born of intuition, and by intuition I mean a sensitivity to radiations in such a way that their impingement can be translated by the conscious mind.

It is a philosophy which sees beyond the immediate present. A sense that man should be the benefactee of science rather than its victim or tool. A philosophy which sees man as part of a Divine Cosmos, an order, an intelligent mind capable of tuning to THE mind.

This is the real man—not the infinitesimal speck of a macrocosmic universe, nor the complexity of atomic energies in the microcosmic conception. It is a philosophy which enables man to see the wonderful in the ordinary rather than the extraordinary.

It is on record that Archbishop Whately was once talking to an enthusiastic young curate, who said: "My Lord, you don't know how good God has been to me—only last year I went to America, the ship caught fire and I was saved from the burning hull." To which the Archbishop replied, "God has also been very good to me. I also went to America last year and the ship didn't even catch fire."

It is a philosophy which keeps science really progressive because it encourages an attitude of mind which is receptive to new ideas. As someone has said, "You can't be a tram for 30 years and then suddenly become a bus."

As long as you cultivate this attitude of mind though you may be called dreamers and impracticable by the unenlightened, yet science will prosper in your hands. For it is this spirit which enables ordinary men to do ordinary things in an extraordinary way.

"Hold high the torch, you did not light its glow
'Twas given you by other hands you know
'Tis only yours to keep it burning bright
Yours to pass on when you no more need light.
. . . . . .
. . . . . .
I watched my father carry it that way."

THE MUSIC OF CRYSTALS, PLANTS AND HUMAN BEINGS

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Introduction

Just as the driver of a car recognises through the noises produced by the engine whether it is running correctly or not, so also any medical doctor knows very well how great a part sound plays in his medical diagnosis. Whether he percusses with his finger the body of his patient, or uses the stethoscope, it is always the sound in its various forms which will give him the required information. As a matter of fact, already Robert Hooke, an English physicist, wrote in the late 17th century that ". . . it may be possible to discover the motions of the internal parts of bodies, whether *animal, vegetable, or mineral* (italics mine), by the sound they make; that one may discover the works performed in the several offices and shops of a man's body, and thereby discover what instrument or engine is out of order, what works are going on at several times, and lie still at others, and the like; that in plants and vegetables one might discover by the noise of the pumps for raising the juice, the valves for stopping it, and the rushing of it out of one passage into another, and the like? . . ." (1). This text can hardly be enough emphasised. Unfortunately its implications have been left almost untouched up to the present time.

It is quite evident that the flow of the blood, the beat of the heart, the functioning of any organ, &c., must produce a noise, as friction is constantly acting there. This noise, as Hooke noted, can be compared to the hum of a factory, and by its quality one will be able to find out what is actually going on inside. It is believed that there is no need to say more about this fundamental truth.

Is the stethoscope which is in constant use by medical doctors, or the percussing by the finger of the chest or abdomen, &c., sensitive enough an instrument for modern requirements? It is not intended here to argue about the simplicity of these instruments which can be carried in any doctor's pocket. Neither shall we deny that the human ear is extremely sensitive to a narrow wave-band of sound in the range of about 2,500 c/sec. But to higher or lower frequencies the human ear is either very inefficient, or

even completely deaf. And it is very possible that just these particular noises are the most important. The pulse of the heart is extremely low, and it is still the most fundamental. Actually all the life pulses, as experience teaches us, are very slow. These pulses are entirely below the threshold of audibility. Others, which are above the audible range, on the contrary, produce often deadly effects, or are at least very dangerous. We mean here the ultrasonics. From this very short inspection of the problem it is immediately seen how very important it is to get exact information of these particular noises in the organism. The present technical developments of our age should easily provide good enough means not only to amplify the quality of these noises, but also to show us their actual picture on the screen of a cathode ray tube. In other words to show the quality of the sound in a pictorial way.

Theoretically speaking this could be displayed in a two-fold manner. One could show the actual wave-form on the screen, with its very complicated peaks and sharp turnings. Or else, one could demonstrate the interference pattern resulting from these thousands of waves superimposed on one another. Let us explain this. It is enough to set two sources of waves on a surface of a still water, to see such pattern of wave interference. (Slide shown) (2). There are crests and troughs, rows in between, and they are perfectly symmetrical. Now imagine this in *three dimensions*. Let us pass through this pattern a strong beam of light, so that it would light up, say, all condensed nodes as small stars. You will then get a picture of a beautiful network looking actually exactly as an X-Ray pattern of a crystalline lattice produced by Laue method. (Slides shown) (3). If we imagine further that all these flickering star-points—according to their intensity and frequency interferences, beats or pulses producing periodic scintillations—will assume different colours and shades, then you will have an exact picture of a sound interference pattern, but instead of seeing lights and their colours, you will hear a beautiful harmonically related music. Such music, apart from its melody and orchestration, will have in addition a morphological shape. It will have a structural and architectural appearance. The modern technique should provide us with means to project such patterns on a Braunian tube (cathode ray tube). An investigation of these patterns or wave-forms should provide a perfect means of information of what is going on in the organism and organs of the human body. It should enable the doctors to give an exact diagnosis. As a skilled physiologist looking at a microscope slide of a tissue will immediately recognise what tissue he is dealing with, so exactly the same should result from the wave interference pattern or wave-form, watched on a cathode ray tube. Any distortion in such pattern will inform the modern doctor that there is something wrong.

The Music of Crystals

Before we enter on a discussion of crystals themselves, let us first define what is meant by music. One single note, e.g., middle C, is not itself music. This is only periodical vibration in time, and we call it a tone. On the contrary, when we hear a collection of tones, which follow one another in time, we may call it a tune or melody, and when tones appear together then it can be a chord.

If these collections of tones are not properly and proportionally related, then they produce a noise, but when the proportionality is preserved, then our ear appreciates it, and it appeals to us as music. We can see immediately that the meaning of the word "music" is essentially related to a certain proportionality between a collection of tones. This proportionality could be described also as a *correct relation* or *proper relativity* between two or more motions; periodic motions. The word *proper* represents the meaning of *evaluation* of these proportions, which evaluation is a purely mental process. Nevertheless, instead of using the expression "proper relation or relativity," it is preferred to stick to the word proportionality, which is believed to render the meaning better.

These proportions or proportionalities can be represented by numbers. Thus the relation of the middle C (on the piano keyboard) which has 256 c/sec. to itself, can be written as 256/256. If we accept this as the point of reference, then it can be written as 1/1. The ratio of its first harmonic, the octave to C, numerically is written 512/256, and can be represented as 2/1; the next harmonic, the "g," will be given by 3/1, and so forth. We have thus a divergent series, 1/1, 2/1, 3/1, 4/1 . . . n/1. Such representation—a quite simple one—can be used for any number, so long as their ratios are harmonically related. Thus 512,000 c/sec. to 256,000 c/sec. can also be given by the ratio 2/1, &c. We see then that the relation between colossal or minute numbers can be reduced to a very simple numerical form. As has been said, this ratio is evaluated by a purely mental process, and the mind does not bother as to whether its perception is of billions or only a few cycles per second, whether the ratio is astronomical or atomic in size; what is essential is the harmonic ratio and its value (4).

In music this sequence of tones harmonically related is named by letters, as c, d, e, f . . . and so forth. We must remember that these tones bear a numerical relation of periodic motions in time to the fundamental tone from which we start. In any C major scale it will be the c. Hence, the name of a tone, for instance g, does not mean the quantity of periodic motions in a unit of time, as there are several g's in the keyboard, and each of them has a different frequency. The name "g" represents a

relationship to another tone, and this relationship is evaluated mentally. It is not only a quantity nor a pure physical fact; it represents also a mental process. This statement is most important for the understanding of the Psycho-Physical Law of Fechner-Weber. In any what we call MUSIC the perception of a physical fact is closely related to a mental process of evaluation (5).

If we take the numerical proportionalities only, then these proportions are called in music "intervals," as for instance an octave, a fifth, fourth, a third, &c. The mental process of evaluation relates them immediately to the fundamental tone, the very moment a sequence of such intervals harmonically related is played. It is these proportionalities and their possible sequences which are evaluated and perceived by the ear and involve the mental process. When such sequence fits with our own standard of porportions, we label it as correct, nice or beautiful, but when such a collection of tones does not harmonise with our own standard *inborn in our minds*, then we call it a noise or a discord. Why we have an inborn standard, and of what this mechanism of pleasing and displeasing consists, is a different problem and will not be dealt with here.

This fundamental fact of perception of proportions was thoroughly analysed a long time ago by the two scientists Fechner and Weber, and it led them finally to the formulation of the well-known *Fechner-Weber Psychophysical Law* (5). This law can be applied not only to hearing, but also to vision, and *mutatis mutandis* to other senses, as in all of them, the mental process of evaluation of proportions is involved. When we realise that proportions and contrasts are the essential features of every art, then it becomes evident that the psycho-physical law of Fechner-Weber introduces us to the realm of art and beauty. The physical facts and their mental evaluation are here brought into unity, and open to us a new world for scientific psycho-physical investigation. It happens that we prefer to call it psychosomatic research.

About a hundred years ago a Berlin crystallographer called Weiss (6) showed that the angles in crystals, the proportions between their sides and planes could be represented by musical relationship. This idea was taken up later on by a German scientist, Victor Goldshmidt. In his book *Über Harmonie und Komplikation* (on Harmony and Complication) (7) he showed by all sorts of matrices and exact measurements, that the harmonical musical principle plays an essential part in the world of crystals and their growth. The different crystals follow different musical scales and tonations as E sharp major, E flat minor, &c.; they have separate collections of tones, and show along their co-ordinate axes different motives for polyphony and contrapoints. The axes of the crystals are the points of reference in

these measurements of proportions. H. Kayser aptly calls them the " crystal tuning forks." (Slides shown) (8).

The essential reason for such musical representation of crystals lies in the nature of molecules and atoms ; in the basic construction of matter. *Atoms are known to be harmonic oscillators*, where the oscillators themselves are the nuclei, and the electrons and their orbits are, may we call them, the reverberation and echoes of the periodic harmonic motions of the nucleus. Actually the electrons represent the peaks or condensed nodes in the wave interference pattern, and the orbits, and we must not forget this, are the nodal points of the standing waves surrounding any atom. It is music on the atomic scale, and the musical proportionalities are perfectly preserved there. The quanta and their integral numbers with their boundary conditions and energy states leave no doubt about it. The electrons and their shells are the function of the nuclear oscillations and *vice versa*. They are all a sort of double chorus playing alternately their musical proportions. From the very foundations of the atoms, up to stars and galaxies the harmonic law of proportions is the fundamental one. Kepler introduced it into astronomy in his work *Harmonice Mundi*, whilst nuclear physics discusses it in terms of atoms.

This fundamental law of harmony is perceived by human beings as proportions and their musical relationship. Whether the distances are astronomical in size, or minute as atoms and sub-atomic particles, the proportions are always the same, and can be represented by simple figures, as already stated : 1/2, 5/4 . . called in music intervals. They can also be labelled with musical names, c, g f, d . . . There is no need to be a great expert in physics and philosophy in order to see that these proportionalities can be applied not only to the material world, but also to the immaterial one, as this perception of proportion is essentially a mental process. It has been shown before and we repeat it here again—the psycho-physical law lies at the basis. It links together soul and body, mind and matter, God and creation. It is the law of Beauty and therefore related to Goodness and Truth. *Pulchrum*, *Bonum*, *Verum*. The Supreme Being as Beauty, Goodness and Truth must be reflected throughout creation.

In Psychosomatics this law—the Psycho-Physical one—must be the starting point of all real and orthodox scientific research.

Let us return to our crystals. It is well known that they are a splendid network—in physics usually called a lattice—of atoms and molecules which co-ordinate themselves according to their specific axes, and produce thus the resulting shape, the morphological appearance of the crystal. Here are some X-Ray patterns of the crystalline lattice (slides are shown) (9).

A question arises now whether such crystals are surrounded with any actual real musical field ? Will a mechanical vibration

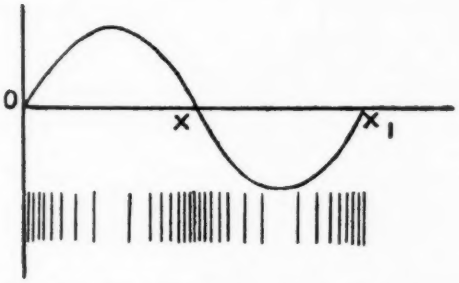
of sonic nature surround it? We must consider this more closely.

It is known that the molecules of the crystal have only certain freedoms of vibration. They can only move in certain directions, or, say, along certain axes. Putting it a different way, their thermal agitation is polarised more in one direction than in others. Such general motion of particles over a surface of a crystal will produce also a similar one in the molecules of the surrounding gas, e.g., the air. An artificially forced vibration induced in such a crystal can produce a very strong beam in the air. Some ultrasonic beams of such vibration can kill a rat at a distance of 100 yards. Normally there is no such forced vibration in crystals in their natural state. Their periodic motion is a free vibration of an extremely faint nature. This vibration being also a mechanical one will have of course a sonic character, although it may not be audible, simply because it may be too faint or not in the audible range. To a certain extent a vibration of a crystal can be amplified by simply knocking it. This can be done with any object, and it will give out a noise according to its shape, size, chemical nature, state of tension and so forth. We must remember though that in such a case we hear the resultant of two noises, that from the knocking object and that from the object knocked. As every object has different modes of vibration, as we call it in physics, we shall usually hear only one component of its proper vibration. A better example of amplification of the free vibration of, e.g., glass, is when a singer sings into the glass its own note and shatters it to fragments. This is due to the principle of resonance. If the singer could produce by his voice all the vibrations of the components of the glass, a complete disintegration would follow. The released energy would be colossal.

Are there any electrical components of such vibration? J. C. Bose showed a long time ago that *a mechanical impulse* involves electrical currents. We know from piezoelectricity of crystals, that any mechanical change of pressure on the Y axis is accompanied by a proportional change of electrical voltage along the X axis. Latest reports seem to attribute piezoelectric phenomena —though very weak ones—to any objects. This is in an exact agreement with what J. C. Bose showed in his numerous experiments (10).

The exact opposite, namely, that alternating currents produce mechanical phenomena, was shown by a French scientist named Ludin. He proved that when a metal wire is heated by an alternating current a sound may be heard, having a frequency double that of the alternating periodicity of the applied current (11). This is immediately understood in the light of the following curve, where the sine wave represents the electrical frequency (transverse component), and the vertical lines denote the mechanical longitudinal component. We see that one

is double the other. As a matter of fact, here is the actual physical reason why harmonics do actually appear in any wave motion. (It shows the mechanism of it*).



We know that any frequency creates its harmonics, but as far as my knowledge goes, the exact physical mechanism of it has never been shown. It is due to the close relation and connecting link between the transverse and longitudinal component of *ANY wave motion*. From the experiment quoted above we see that electromagnetic and mechanical phenomena are strictly interrelated. Mathematically I have shown this generally in the paper called "The Gravitational Wave." It is applicable to light as well, this being accepted as an electromagnetic wave. The experiments of Prof. Ehrenhaft confirm this.

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* It may be objected—as Ludin does—that longitudinal vibrations in wires are entirely excluded. This is only partly correct. The molecules of the heated wire try to vibrate along the direction of the electric field. As this is actually to a great extent hindered, their vibration will result in the direction permissible by the conditions. The following experiment which demonstrates this is due to Young. "He allowed a sheet of sunlight to cross a pianoforte wire, and obtained thus a brilliant dot. Striking the wire he caused it to vibrate, the dot described a luminous line like that produced by the whirling of a burning coal in the air, and the form of this line revealed the character of the vibration. It was rendered manifest by these experiments that the oscillations of the wire were not confined to a single plane, but that it described in its vibrations curves of greater or less complexity. Superimposed upon the vibration of the whole string were partial vibrations, which revealed themselves as loops and sinuosities ... (Figures of these lines are shown). Every one of these figures corresponds to a distinct impression made by the wire upon the surrounding air" (from J. Tyndall, *op. cit.*, p. 121). Actually it can be shown, that any transversely vibrating wire fixed at its ends, will produce at these ends a stress-strain reaction, which in its turn will tend to produce a longtitudinally vibrating component along the wire, resulting in a standing wave. Young's experiment partly reproduces this effect. Thus, it is believed, the meaning of the above diagram is explained. The full mathematical treatment and his arguments against Young and Fresnel can be found in the works of Poisson. See also Prof. T.J.J.: "The New Theory of the Aether," *Astron. Nachr.* No. 5085, vol. 212, Feb., 1921, where the Poisson discussion is treated at length. *Mutatis mutandis* it can be applied to our case.

Returning to crystals, it may be stated that their field is electromagnetic as well as mechanical. Its actual basic foundation can be found in the so-called fine structures of the fields of atoms and molecules. These fields are known to be of electromagnetic nature. It is then quite evident that if we change periodically the mutual position of molecules and atoms, a similar periodic change will occur between their electromagnetic fields, so emitting an electromagnetic wave. A mechanical periodic molecular vibration must radiate an electromagnetic periodic wave. As a matter of fact the infra red band emitted by any kind of matter is partly of such a nature. Does not heat arise from the mechanical motion of thermal agitation? Now, if such thermal agitation be polarised in a certain direction, thanks to its mechanical motion, it will produce a sonic wave. This is just what is to be expected in crystals, where the freedom of vibration of molecules is polarised.

It is also well known that in a great many crystals we find the three axes **X**, **Y** and **Z**: the electrical, the mechanical and the optical. This is due to the fact that all the molecules of crystals are axially arranged together with their harmonic proportionalities. Hence the field surrounding the crystal will not be an isotropic one, but definitely anisotropic. Along the **Y** axis we shall expect mainly the mechanical phenomena to appear, along the **X** axis the electrostatic, and along the **Z** axis perpendicular to the other two, light will operate as an electromagnetic phenomenon. We may find here reason for Reichenbach's claims that light emitted from the top and bottom of crystals was visible to sensitive persons. He succeeded even in photographing this light. But as in those days there was no theoretical explanation of such a possibility, the whole thing was entirely dropped. Now, in the light of modern knowledge, this phenomenon seems to find a reasonable foundation.

To end this short discussion about crystals and their proportionalities it would perhaps be worth while to show some picture of snow crystals taken from the microphotos in H. Kayser's book, *Grundriss eines Systems der Harmonikalen Werdformen* (Occidentverlag, Zurich, 1946), and compare them with matrices of musical perportionalities made for the possible interference between two or more tones and their harmonics (slides shown). From this comparison we may easily form a more exact picture of how musical harmonic proportions can be represented by the morphological appearance of crystals.

Plants

We pass now to the next subject of to-day's lecture, "Plants." It is known from every day experience that plants grow according to the proportions which are proper and particular to any one

of their species. These proportions can be easily measured and represented by numbers. Kayser in his most interesting book *Harmonia Plantarum* (12) has shown how these proportions can be perfectly represented by musical intervals and tones, as well as how they follow the harmonic law in their growth.

According to this law, if we strike the middle C on the piano keyboard and release the damper from the strings, its first subharmonic below will be c, one octave lower, the second subharmonic f, then c again. If we go further, we find and perceive by the ear a minor sequence of notes following the minor scale proportionalities. The mental evaluation shows a minor scale. Numerically this sequence is represented by 1/1, 1/2, 1/3, 1/4 . . 1/*n*. If instead of going down from the middle c we go up, the harmonic sequence is represented numerically as 1/1, 2/1, 3/1, 4/1 . . . *n*/1 and our ear perceives them as major scale proportions. One is the mirror of the other. Generally speaking, on striking any tone on the keyboard the harmonic sequences will always follow the same sequences of, say, major or minor scales. The dividing point is the tone which has been struck, from which the harmonics toward both ends are counted. For more details we refer the reader to the excellent works of Kayser from which the above was learned. It is necessary to mention that every tone assumes a certain angle relative to the fundamental tone.

If we would try to represent the numerical values of the above sequences by respective sectors in length and their angles, then, taking all the above factors into account, the resultant picture represents schematically the exact shape of a plant. Excellent drawings are given by Kayser in his *Harmonia Plantarum* on pages 27, 32, 41. The dividing point is the one at the surface of the earth, the point of germination. The proportions above the ground follow the major scale, and below, the minor one. Of course they can be represented by musical notes, as actually Kayser did, drawing them beneath the schematical design mentioned. Such representation of sectors gives us a good picture of the growth of the stem and the roots (slides shown). If we now imagine this in three dimensions we have the perfect shape of a plant.

One of the most important observations is that the proportions which the growth of plants follows, do not correspond to the numerical value of frequencies. On the contrary it follows the logarithmic law, the same law which stands behind the evaluation of the ear. This evaluation, as it was said, is purely a mental process, and lies at the base of the psycho-physical law of Fechner-Weber. Strangely enough the growth of the plant is governed by the same law. It follows, as Kayser demonstrated, not the material impulse, as he calls it, of pure quantity, but the mental impulse of value (13). In other words it grows according to

the law which governs the world of art and not that of pure quantities.

A further interesting detail is, that from the way the offshoots from the stem grow in any particular plant, one can find the differences of the phases between particular tones and frequencies, of which the very shape of the plant is the result. A great deal could be written about these phase differences, but this would lead us too far. We have to refer the reader again to the works of Kayser (14).

It is easily seen that any seed is not a random accumulation of matter, but a well organised one. Hence only certain freedoms of vibration are permissible and, in the whole seed, the directions are axially polarised, just as they are in any crystal. This freedom of vibration along some specific axis, will depend on the chemical combinations existing in the seed and their chemical bond. The resultant pattern of these vibrations and molecular arrangement, if amplified, will influence the growth of the plant. Now, let us suppose that, for instance in a seed of a particular species of a plant, we have a combination of three fundamental proportionalities, or simply tones, thanks to their chemical constitution. They may be the c, g and e, which form a major fifth, the c-g, a major third and a minor one, c-e and e-g. These tones will have different frequencies and different harmonics according to their pitch. They may also have different amplitudes, that is intensities. A combination of these tones, thanks to their interference, will produce a definite pattern in three dimesnsions. It would be enough to amplify these mechanical vibrations which lie hidden in the seed—where this vibration is extremely minute and faint—in order to produce an outburst of the seed. This amplification can be compared to the example given above, of a singer singing its resonance tone into a glass. The glass breaks into pieces when the amplitudes of the molecules become too large, for it cannot grow. On the contrary, the plant being a living thing, begins to grow, but it will begin to grow according to the particular interference pattern of its component tones, the amplitudes of which have been increased. The cause of the amplification, which increases the momentum of the molecules, (which is dependent on their freedom of vibration) is Light. To its different wavelength the molecule will react differently. We know that the infra-red band of the light spectrum increases the momentum of molecules by thermal agitation. We see why heat is indispensable for the plant's growth. Other frequencies of the light spectrum will produce analogical effects in their wavelength range. Ehrenhaft's photophoresis, and his latest experiments with graphite dust, leave no doubt about this effect of light (slides of Prof. Ehrenhaft's experiments shown) (15). This aspect of the problem explains in one stroke a great many facts. Unfortunately we have again to drop this point owing to shortage of space and

time. All that can be said is that the increase of the momentum is due to the pressure of light along the so-called Poynting's vector. It is due to the longitudinal component of light, about which more details have been given in the writer's paper, " The Gravitational Wave " (16).

From the combinations of the possible freedoms of the vibration (due to the chemical bond, &c.) of the seeds, different patterns will result, and the growing plants will assume a different shape, and achieve a different morphological form. We see that the shape of the plant, the peculiar shape of the species, results from the interference pattern of the combinations of the mechanical waves, which we usually call " sounds." From different collections of tones, intervals and their amplitudes, specific shapes will emerge. Such shapes are literally music petrified in form and matter.

Of course the environment of the growing plant will have something to say here as well. In different positions and environments, a slight change in the accidentals of the shape will appear. But the fundamentals will not easily change. Actually the very root and basis of genetics are tangible here.

Considering all these quite logical factors, and accepting them as a working hypothesis for a possible solution of these most interesting problems, it was concluded that the sap of the plant must essentially have in itself the same vibratory combinations as the plant. By crystallising the sap one would expect that the shape of the crystal will correspond in some way to the morphological appearance of the plant, from which the sap was taken. Therefore specimens were taken and examined under the microscope. In several cases of very typical shapes of the plants the results were definitely positive. The best examples were obtained with the sap taken from the leaf of Yarrow, or otherwise called Milfoil (*Achillea Millefolium*), Nasturtium or Indian Cress (*Tropaeolum Maius*) and Dandelion (*Taraxacum Officinale*) (slides shown). The sap was simply dropped on the microscopic slide and permitted to dry and crystallise. This proves that the principle is not without foundation, anyway in some cases. We leave the more exact determination to specialists. One curious phenomenon was observed. In order to obtain these crystalline patterns, the sap had to be put on the slide shortly after the plant has been picked up. Also better results were obtained when the plants were picked after rain than during a dry spell.

From these results and the logical trend of thought, we may presume that the future shape of any plant is concealed in the vibratory motions of the seed. It is also believed that the general lines given above can be accepted at least as a working hypothesis.

The Human Organism

Before approaching the subject the reader is asked to remember that the problem is purposely simplified in order not to blur the general picture with details.

We may pass now to the human body. It has been shown in the introductory part that the human organism must be surrounded with a "noise," which is the function of the molecular agitation going on in the organs. We can easily see that each organ will have its own sonic field—its own noise—which, if properly detected, should provide us with information of the processes going on in them. We should also keep in mind that the human body, as well as the particular organs, is not a heap of matter accumulated at random, but a well-organised entity and hence bears a sort of analogy to crystals. In scientific literature this analogy has long been suggested.

The first question which presents itself to an investigator is: Can it actually be demonstrated that our reasoning as to the presumed sonic field of the human body is valid? Can any experiment be given as a proof?

First of all let us state clearly that these sounds must be of an extreme faintness, as otherwise our ear would detect them. Therefore a very sensitive detector must be used. In the history of physical science all sorts of devices have been found for detecting such sounds. One of them is a sensitive flame, and another a sensitive jet. These sensitive jets have been investigated, mostly by Felix Savart and John Tyndall. They are also sometimes called sensitive veins. We shall here use such jets as a detector.

Under a steady pressure you allow a water jet to flow UPWARDS at a certain angle. When this jet is illuminated you can see that it is surrounded by a whole crowd of small droplets flying in nearly all directions. It is known from Savart's and Tyndall's experiments that such jets under the influence of a sound wave in resonance with them (not all frequencies therefore will produce the effect; the selection of the frequency depends on all sorts of details) will immediately collect all these droplets into one bunch, and a definite wave pattern will appear on the jet vein itself. Please note that this wavelength of the jet does NOT correspond to the wavelength of sound which produces the effect. Actually such jets are the finest sound detectors known. Remember that in using the word "sound" we mean, throughout this paper, all mechanical vibrations, that is the audible range, as well as the ultra and infra sounds.

What does Tyndall himself write about such jets? He uses a steatite orifice to produce them, as he claims that it is far more sensitive than any other one. Here is his description: "By means of an india-rubber tube the burner (orifice) is connected

with the water-pipes . . . and, by pointing it obliquely upwards, we obtain a fine parabolic jet. At a certain distance from the orifice, the vein resolves itself into beautiful spherules, whose motions are not rapid enough to make the vein appear continuous. At the vertex of the parabola the spray of the pearls is more than an inch across, and, further on, the drops are still more widely scattered. On sweeping a fiddle-bow across a tuning-fork which executes 512 vibrations in a second, the scattered drops, as if drawn together by their mutual attractions, instantly close up, and form an apparently continuous liquid arch several feet in height and span. As long as the proper note is maintained the vein looks like a frozen band, so motionless does it appear. On stopping the fork the arch is shaken asunder, and we have the same play of liquid pearls as before. Every sweep of the bow, however, causes the drops to fall into a common line of march." Tyndall shows further that beats between two frequencies can be actually seen on such jets (17).

It has been found by the writer that if such a jet is flowing under a very low pressure, it becomes still more sensitive. Instead of using the steatite burner or orifice, we use a simple one of metal, and the jet is produced by using an ordinary German-type primus. By pumping the air into the container and by a special screw which can regulate the opening of the tube leading to the orifice, we can thus adjust the jet itself and its pressure. The best results are obtained when the jet is not higher than about three inches.

If the human body is surrounded by a sonic field, as theoretical considerations predict, then we should expect that a similar effect would appear on a water jet as described by Tyndall. This is what actually happens. The very moment we approach our hand, for instance, to such a jet, all the small droplets collect themselves together and the jet assumes a definite wave pattern. So long as the hand is held by the jet this wave pattern is visible. We withdraw the hand, and the spray of droplets again becomes visible.

Experiment shows, so far as one can notice with the unaided eye, that this wave pattern in the jet is not a simple sine wave, but betrays rather a more complicated wave-form such as would result from hundreds of waves superimposed on one another. Such a wave-form is just what would be expected, as the human sonic field is by no means a simple one. If, as Tyndall maintains, beats between two frequencies can be observed on such a jet, then in a more sensitive one a whole wave-pattern would be observable as well. Hence it is suggested that such jets should be observed by a conveniently arranged telescopic tube, set at a distance from the jet, as otherwise the sonic field of the telescope itself will affect the jet predominantly. It must be recalled that in any object the molecules have their thermal agitation,

and thanks to the limited freedom of vibration and its directional resultant, by summation a sonic field should surround the object. Such a field will affect the jet. This can be actually observed by approaching any object to it. Remember, it is not the effect of temperature, as a source of heat from a distance will not affect the jet. It is also suggested that interesting results should be obtained in low temperatures with jets of liquid gases.

This fact, it is believed, gives an experimental proof of our theoretical considerations. As to the possibilities of a wave-form appearance on the jet, we abstain from definite statements until a telescopic observation shall actually prove it. It may happen that for every individual a different pattern will appear on the jet. Other liquids than water should be used as well. Chemical affinities and resonance principles should be observable by such methods ; anyway wide possibilities are open to research. We may note here that the effect on the jet of the magnetic and electric fields is powerful. Lord Rayleigh noticed this with electric fields years ago (18), but no special attention was then drawn to it. As for the magnetic field it is believed that this was not observed and was unknown till now. The explanation is simple. In the electric as in the magnetic fields the air molecules and their thermal motions are polarised in the direction of the field, and will thus produce a resultant sonic field. When the dielectric rod is rubbed its molecules are put in vigorous motion, though inaudible to the ear. For more theoretical details we refer the the reader to the notes of the writer's paper read to the Congress of Radionics (19). As to sensitive flames it is believed that they are not as sensitive as the jets are.

The general statement can now be made that, as well as the human being, all objects are radiating sound waves, and therefore their fields are sonic fields as well. Of course every individual will have his own different pattern, a different collection of tones, as the shape, the geophysical position, the state of health, &c., is different in each of us.

It must be noted that this sonic radiation will impinge upon the surrounding objects, and be partly reflected by them. Therefore, according to the environment, a standing wave pattern should surround us, with its nodes and antinodes. As we move about in life, the field of the standing wave arranges itself accordingly, and will change in some accidental details, but the fundamental pattern of interference will remain permanent. The general law could be defined thus : *This radiation and its pattern is due to the distribution of the matter and its mutual correlation* in any individual case. The actual chemical nature of the matter, its temperature, shape, position and so forth, is implicated by this definition. We entirely omit here the electric components of the field. Now how can we explain in the above light the therapeutic

results of drugs, plants, the curative effects of music, especially in some nervous diseases, &c.

Here in our opinion we have to turn to gravity. Suppose that from the planetary system we withdraw suddenly the planet Jupiter. What will happen to the motions of other planets? In accordance with the third Keplerian Law, their motions and distances from the sun will rearrange themselves immediately, as one of the potent factors influencing their revolution has suddenly disappeared. A similar effect would result if the motions of Jupiter were suddenly changed, enhanced or damped. This mutual dependence is so strong that thanks to the observed discrepancies between the actual planetary motions and the calculated ones (motions of Uranus) an English astronomer, Adams, was able purely by mathematical means not only to show the existence of a new planet unknown at that time, but also to point to the very place where this planet should be present. (Independently of Adams the French astronomer Leverrier calculated similarly). Neptune was actually found later there. If instead of moving Jupiter we were to remove or change the motions of Mars, then the rearrangements of planets would be different. The writer asks you to remember this, as we shall return to this example in the problems of fever.

The harmonic law of Kepler (the third law), to which this German astronomer came by pure harmonics (see his work *Harmonice Mundi*), can be applied not only to heavenly bodies, but also to atoms and molecules. If, for instance, we were to remove one molecule from a certain area where ten others are, then these ten would immediately rearrange their motions accordingly. The whole Universe, both atomic and astronomic in size, is ruled by this same law of the mutual dependence of the motions of bodies freely suspended in space.

Now the growth of a body, so long as it is not interfered with by some outside source, will peacefully follow this harmonic law. The matter will accumulate in relation to the forces acting in the interference pattern. This accumulated matter will have also an harmonically distributed field, which is the function of the vibration of material particles. Thus, for example, the liver will grow in the human body in harmony with its vibratory pattern and with the surrounding organs, or better with the surrounding wave-patterns of the environment. The molecules will accumulate in hips and troughs in accordance with the ruling pattern.

Suppose now that into this field an alien impulse is introduced, which vibrates in dissonance with the pattern of the liver and its natural law. It will produce a discord in this orchestrating field, and will influence by its own vibrations the molecular motions of the liver, producing a damping effect by shifting their phase angle or by enhancing some components and nulli-

fying others. A sort of forced vibration is imposed. If the liver is strong enough, that is, if its amplitude is of full strength and is undamped by previous wrong impulses, then it will resist and finally force the new impulse (or the alien matter) to vibrate at the liver's rate and pattern. The " stranger " will only slightly damp the vibration of the liver's molecules. If, however, the intrusive vibration should find in the liver's motions a resonating component and thus acquire some strength, then it will be able to impose its own vibrations on the liver (usually a resultant will follow), a new molecular arrangement will occur detrimental to the harmony of this organ, and hence to the whole body and its health or state of balance.

There are some reasons for believing that the blood has a strong absorbing capacity for such vibrational patterns. We shall return to this later. Thanks to its circulation it will spread such vibration all over the organism. However, as other organs are not in resonance with other patterns than their own, they will not resonate to it in full strength. It may, nevertheless, easily happen, that one of the most distant parts of the body will be in resonance with one particular component of the spreading vibratory rate and wave-form, and so this component will suddenly be enhanced. The amplitude will grow above the normal required for the harmonious (balance) health state; the heat will there increase and an inflammatory state will arise. If the *phase* of the damaging factor is not exactly *in phase* with the enhanced vibration of the organ concerned, beats will emerge in the form of pulses. Now the nervous tissues of this resonating organ have grown in harmony with the former pattern of the organ and its amplitude. If then this amplitude should suddenly grow above the normal, and the pattern change, respective signals will impinge upon this nervous tissue, and it will be sent along them to the brain. Such signals will be most probably perceived by the brain as pulsating pain. If, however, there is no phase difference between the wave-form of the forced vibration and the one natural to the organ, by steady enhancement of one of the components a steady impulse will be sent to the brain, and the pain instead of being felt as pulsation will be perceived as steady. Personally the writer believes that all pains are pulsating ones, but some of the pulses are so quick that they are felt as steady. This opinion is the result of purely theoretical considerations.

What will happen when the invader of the organism finds in one of the organs a component resonating more fully to its own vibration? From the theory of resonance, it is apparent that the amplitude of the resonating component should grow abnormally and tend to pass above some critical point—we shall call it the strain breaking point—and the molecules will then break asunder and the tissue will start to decay. This process again

finds an analogy in the singer singing into the glass. It will first respond by enhancing its vibration, but finally will break up entirely and splinter into pieces.

It may happen though that a tissue instead of decaying will grow, like the seed mentioned above, impelled by the enhanced vibration. Then an example of cancerous growth will occur. Just as matter, under a localised impulse breaks in a star-like way, so does a cancerous growth in some cases spread into its surroundings.

Returning to the decaying process, essentially it comes down to the processes involved in chemical decomposition.

Fever is actually a thermal process enhanced. In an organ, by the resonance principle, one of the components of its vibration pattern enhances the momentum of the molecules of that organ. The temperature grows as the momentum grows, that is the amplitude (intensity). At the moment the amplitude passes the strain breaking point the organ will start to decay. In order to prevent such a calamity the circulating blood comes to help, absorbs the heat that is a part of the momentum of the molecules, and by spreading it through the whole of the organism increases the surface of the radiation. Not only the localised amplitude of vibration, but the momentum is decentralised as much as possible, and so prevents decay, but it also permits the emission through radiation of the increased momentum of the body, simply because the surface of the radiation is larger. The stronger the resonance which produces the increase in amplitude, the higher the fever. The heart beats quicker, the circulation of the blood is stronger, and the radiation increases. It can be shown that all this is the mere function of the increased heat. As a matter of fact, the pulsation of the heart is a function of the temperature, or more exactly the function of the general amplitude of the molecular vibration. We see here how, by the principle of resonance and wave-theory, a great many things going on in the organism can be reasonably explained. It is indeed hard to deny the great advantages of such a theory.

In problems of fever it must be realised that it is not only a simple enhancement of the linear momentum. It also must result in a change of the pattern of the momentum of molecules. This change of the pattern, however, will depend on what component of the general pattern has fallen into resonance with the new introduced vibration. Different invaders, having a different wave-form, will fall differently into resonance with various components of the complicated wave-form of any particular organ. Hence one would expect that the thermal agitation of the fever, in any particular illness, would produce a different pattern in the Brownian movement of the blood. Theoretically every man according to his particular health and psychological state should have slight differences in the pattern of his blood and its thermal

or Brownian movement. Strangely enough this can be mathematically proved.

An example will perhaps make this more clear. The reader may remember what has been said about the different rearrangements of planetary motions, according to whether Jupiter or Mars be removed from the planetary system. Well, a similar reasoning can be applied this time to molecular motions in the problems of fever. In *one* particular illness some harmonical components of the general pattern are cancelled and others enhanced. In *another* illness other components are subject to the same fate. Hence in both cases a different rearrangement of motions will follow in analogy with the example taken from the heavenly bodies. We see how temperature is basically a gravitational phenomenon. Dr. Benham in his paper called "The Nature of Temperature," is definitely right in his general claims (20). From the above it is concluded that there is no random element in the Thermal Motion, though it may appear as such in the microscope at the first glimpse. The law of the mutual dependence of the motions of bodies freely suspended in space is fundamental here.

An invader of the organism can by its new vibratory pattern not only enhance one of the components, but also cancel one of vital importance to the state of balance. This will happen when the respective frequency is out of phase by 180° with it. A standing wave will result which will nullify the action of this vital element, i.e., its vibration. No fever will result but pain or a lack of balance will be the effect.

As to the absorbing capacity of blood for different patterns of motions, you may remember what has been said about the sap of the plants and their crystallisation. It was presumed there that such sap should contain the vibratory patterns of the plants, and that it therefore should crystallise accordingly. Subsequent microscopic investigations seemed to give experimental support, anyway in some cases. *Mutatis mutandis* the same principle can be applied to the functioning of blood. By its crystallisation pattern we should be able to recognise, at least in the most general way, what is actually going on in the organism. A sample of blood taken from the body during a particular illness, when vaporised and conveniently dried, should, thanks to its absorbing factor, crystallise in accordance with the vibratory pattern it actually contains. The so-called groups of blood should find here their basic *physical* explanation. The actual crystallisation of blood, about which we know something from the interesting photographic slides obtained from the researches of such as Duranton and Countess Chrapowicki, can find also here its basis. It must be emphasized however, that the changes in crystallisation should appear in the accidentals and not in the fundamental crystalline network. Actually the so-called Laue method (with X-Rays)

when applied to blood crystalline structures, should reveal most promising results (21). The Duranton methods may also give further information. As all these researches are as yet in embryo, it is not yet time to make any definite statements. It is hoped, however, that the foregoing theoretical discussion is logical enough to be accepted as a working hypothesis.

The writer has investigated microscopically the crystallisation patterns of catarrhal mucus in its different stages. It was observed that slight differences could be found in the crystalline structure when the catarrh passes through its varying phases. The patterns are beautiful and mostly similar to leaves of fern or certain kinds of moss. In a different series of microscopic researches the crystallisation of the albumin of eggs of domestic birds was examined. It showed in accordance with the theoretical predictions, that each species of bird has a different pattern of crystallisation, although the generic pattern of birds is always preserved. When one has become conversant with these, it can then be immediately recognised to what kind of bird this particular albumin belongs. Such researches were carried out with a veterinary doctor, Mr. Briks, in 1949-50.

In the light of what was said above, the mechanism of the curative action of drugs and plants is easily visualised. A plant which has a similar pattern or wave-form to that of the particular invader, or illness, but out of phase by 180° with it (i.e., the mirror picture of it), at the moment when it is properly introduced into the body, will automatically form a standing wave with the pattern of the illness, thus nullifying its activity. The Hahnemann principle of *Similia Similibus Curantur*, is explained at the same time. By " similarity " the complete similitude of the wave-form is intended.

As to whether homoeopathic doses can be explained by the present theory, we as yet abstain from any opinion. The writer would like, however, to emphasise as much as possible that he is not a medically trained man. It is only the purely physical side which is treated here. The last word as to medical matters we leave to those who have been trained in this branch of science and *art*. A general working hypothesis is here only proposed from a purely physical standpoint.

At the end of this present lecture a few words must be devoted to psychological problems, as we are dealing with a *Psycho-physical law*.

We all know from our daily experience that by our thought we can set in motion certain portions of matter belonging to our bodies. In other words our thought disposes of an " amount " of force. By this force we can change the position of at least a globular amount of molecules of our bodies, as for instance a finger. We can move it. Can we, however, influence the very minute particles of our bodies, the molecules themselves, in the

same way as we do their globular assemblage accumulated in, say, a finger? Can we change their amplitude of vibration, that is, can we influence the temperature? Their rates of vibration and intensities? We have no doubt as to the former, being able to move a finger, a leg, and so on, but it is not so evident with the latter question. From the previous considerations we know that influencing the rate of vibration and amplitude would have a definite result on our health state. We could then change our health by thought. Actually it is believed that autosuggestion is based, at least partly, on such possibilities. The difficulty is to observe changes so minute in comparison with the actual movement of a hand.

Analysing, however, more closely some of the operations of our bodies, we see that change of temperature produced by thought can easily be observed. It is easily noticeable in sexual problems, where certain thoughts change the flow of blood and temperature in the respective organs. Strong emotions are another example. It has also been demonstrated on several occasions that an intensive thought, for instance about a particular finger, will raise the temperature in it, and this temperature change is measurable.

Let us consider the same problem from another angle in order to eliminate all possible objections. We definitely can send nervous impulses, by thought, to certain parts of our bodies. Such an impulse travelling along the nerve, will reach its end and will there change the molecular vibratory pattern, thanks to the physical law of action and reaction. According to the components and kinds of the impulses sent, the vibratory pattern of the molecules will be transformed in the environment of the nerve ending. Every type of action must produce a similar kind of reaction. A great many nerve endings in a certain area will change the pattern of molecular vibration in that area. If such impulses become automatic and subconscious as a steady habit (acquired usually by a repetition of this action), this will definitely and consistently change the molecular vibration pattern. These patterns will respond to particular impulses permanently in a particular way. Physically we can define this as the ability of thought to change through the respective impulses issued from the brain, the actual directional (axial) freedom of vibration, in other words, the ability to change the crystalline network structure. As a matter of fact, we do not see how one could move a hand without imparting well beforehand a certain motion to the molecules as well. Such motion must start from smaller groups and proceed to larger ones. We know that this is what actually happens.

From the study of psychology it is known that a habit consists of subconscious impulses sent to different parts automatically. It is acquired by long repetition, as we have said, of the same

action. The physical mechanism consists in an efficient response of a particular tissue (or muscle, or whatever it may be) and of its minute particles (molecules) to successive impulses. It must therefore be accepted that a habit is related to an efficient re-arrangement of molecular structural vibration in this tissue. Under such habitual impulses the further growth of this tissue and its arrangement will be definitely and permanently influenced. The accidental regrouping and re-arrangement of molecules will be subject to habits. Thus the mental process will influence the growth.

Let us now eliminate any thought interference with growth and its molecular arrangement. The body will grow then according to the law of harmonics. The chemical nature of molecules, their environment and their bonds, will influence growth, according to the vibratory pattern governing this area. It will arrange itself in exact analogy with the arrangement and rearrangement of planetary motions in harmony with their movements and fields. There would be no disharmony, no discord in such body, organs, tissue, &c. The musical field of such a body, as well as the body itself, would be a harmonious phenomenon. The field which is the function of our body's vibratory pattern, would be beautifully and harmoniously distributed. The whole body can be compared to an orchestra, where each particular organ represents an instrument. Our thought is the conductor of this orchestra.

Now, the very moment that thought enters in, impulses are sent to different parts of the body, like electrical signals, through the nerves, and according to these impulses the molecules start to re-arrange themselves. This in turn will affect the environment, and the transmitted radiation will accordingly arrange the surrounding field of the body. By this explanation one can see how thought can influence the human field and the actual growth of the body. Permanent habits through their repeated impulses will influence the respective vibratory pattern of molecules, and the way they will accumulate in the body. Thus the character of the man, his mental habits, should be definitely reflected in the body, in his way of moving, in his eyes, on his face, hands, and so on. Even his way of working will be affected. Thought will affect the growth of the accidentals of the general shape of the body, will carve its lines. This is the reason why we can guess from the way a man is walking, from his face and his palms, the general lines of his character. Thought actually influences the whole reactive system of molecular vibration. The whole body is formed according to the thoughts and habits animating it. What we call soul is the preponderating factor, the essential FORCE which influences the whole and every part of it.

Now human thoughts can be either in complete accordance with the natural law of harmonics and the general pattern of the human being, the generic pattern of its vibration, or in

disharmony with them. In the first case the body will develop harmoniously, and its field will then represent a glorious harmony, containing no impurities and no damping effects. In the second case, the very moment that thought develops, impulses which are in complete or partial contradiction with the law of harmony, the proportions of the vibrations produced by dissonant impulses will not fit into the generic human pattern of vibrations, or into the individual pattern of the man. A human field of this kind will be full of discords and dissonances.

His evil thoughts will create wave-forms, which will contradict the law upon which human nature has grown; will damp the generic and individual pattern of the human being; will affect the balance; will spoil the perfect resonance, and therefore—speaking in terms of wireless circuits—a part of his energy will be released and go back to the GENERATOR. It will weaken the health and introduce into the body the stamp of illness and decay, which finally will result in death.

From the study of Theology we know that what we call a sin is nothing else than a violation of the law of nature, i.e., law of harmony. We thus have here a partial explanation of the mechanism of sin and its natural physical results. It shows us the natural side of it. There are other sides as well, but they will not be discussed here. Anyway sin, or any evil thought, which is not in agreement with the law of nature, will be reflected in the body and in its field, and will appear as a damping effect upon the living force. The resistive strength of the individual is weakened and decay starts. Evil is the first step and the very root of destruction and death. "The wages of sin is death" says St. Paul.

We have had a slight glimpse into the realm of natural theology. We have seen how natural philosophy, the world of science, does not contradict, but, on the contrary, supports the beauty of the teaching of Christ. This will be the subject of a special lecture called "Science and Religion."

To finish, we would like to say that the Creator, who is perfect beauty in itself, that is, perfect proportion, must be reflected in His creation. Anything which violates this law of harmony is called a sin. It is a dissonance in the harmony of the spheres and the beautiful concerto of the Universe. It is in contradiction with Beauty, and therefore also with Goodness and Truth.

REFERENCES

(1) J. Tyndall : *Sound*, Longmans Green, London, 1898, p.41

(2) From E. Grimsehl : *A Textbook of Physics*, Vol. II, Blackie, London, 1944, p. 214, fig. 6 and 7, and p. 215, fig. 8

(3) See K. Lonsdale : *Crystals and X-Rays*, Bell, London, 1948, plate VII, p. 129, plate I, fig. f, p. 16, plate VI, a and b, p. 81

(4) See H. Kayser : *Der Hörende Mensch. Elemente eines Akustischen Weltbildes*, Lambert Schneider, Berlin, 1932, chap. 2, "Zahlgestalt der Harmonik," p. 95 ssq.

(5) See G. T. Fechner : *Elemente der Psychophysik*, Leipzig, 1889, compare H. Kayser : *Lehrbuch der Harmonik*, Occidentverlag, Zurich, 1950, p. 45 ssq.

(6) C. H. Weiss : in the *Abhandlungen der Akademie zu Berlin*, 1818-1819 ; "Physikalische Klasse," quoted after H. Kayser. *Der Hörende Mensch*, p. 159, ref. 1

(7) V. Goldschmidt : *Über Harmonie und Komplikation*, Berlin, 1901

(8) H. Kayser : *Vom Klang der Welt*, Occidentverlag, Zürich, 1946, pp. 88-89 ; see also H. Keyser, *Der Hörende Mensch* as above, chap. III, *Vom klang in Anorganischen*, 2 Kristalographie, p. 159 ssq, and *Lehrbuch der Harmonik*, as above, pp. 65, 93, 229 267,

(9) L. Bragg : *The Crystalline State*, Bell, London, 1949, plate XXIX, patterns of mica and rock salts

(10) J. C. Bose : *Response in the Living and Non-Living*, Longmans Green, London, 1922. See also J. C. Bose : *Comparative Electro-physiology*, Longmans Green, London, 1907, and other works by the same author

(11) E. Ludin : *Metal Wires Electrically Heated and Producing Sounds* (translation), *Archives Des Sciences Physiques et Naturels* I, IV, p. 383, 1922. See also F. Streintz : *Physikalicshe Zeitschr. 16*, 137, 1915, and A. Imhof : *Physik. Zeitschr. 23*, 262, 1922

(12) H. Kayser : *Harmonia Plantarum*, Benno Schwabe, Basel, 1943

(13) H. Kayser : *Harmonia Plantarum*, Benno Schwabe, Basel, pp. 70-71

(14) The works quoted here above

(15) From *Discovery*, May, 1951, Vol. XII, No. 5, p. 152

(16) A. Glazewski : "The Gravitational Wave," *Proceedings of the Scientific and Technical Congress of Radionics and Radiesthesia*, London, May, 1950. Published by the Committee of the Congress, pp. 112 ssq. See also T.J.J. "The New Theory of the Aether" *Astron. Nachr.*, No. 5085, Vol. 212, Feb., 1921, and E. G. Cullwick, "An Anomaly in Electro-magnetic Theory," *Nature*, Vol. 161, p. 969, Jan. 19th, 1948

(17) J. Tyndall, work quoted above, pp. 276-278

(18) J. W. S. Rayleigh : *The Theory of Sound*, Macmillan, London, 1896, Vol. II, p. 369. The proposed explanation by Beetz given there, does not conform with the reaction of jets to magnetic fields. This was not known to Beetz

(19) A. Glazewski : "The Gravitational Wave," as above, p. 140, note 10

(20) W. E. Benham ; "The Nature of Temperature," *Proc. Phys. Soc.*, Vol. LIV, p. 121, 1942.

(21) See interesting note of M. F. Perutz, "Submicroscopic Structure of the Red Cell," *Nature*, Vol. 161, p. 204, Feb. 7th, 1948

WATER DIVINING AND MORE

BY G. CARSON

In 1936 I was for a short time staying with Dr. and Mrs. Robertson of the Scottish Mission Society. Dr. Robertson was a Lecturer (English and Classics, I think) of the Hyslop College, Nagpur, India. He had the most amazing powers of divining water, with a rod, forked stick or any other suitable instrument. He used this gift fo find water for natives or Missions all over India, when they were proposing to buy land or their usual water supply failed. As far as I know Dr. Robertson never had any failures at all, and offered his services to the Government of India when he retired.

I occasionally helped him with this work, which I understand was carried out rather differently from the work of other water diviners. He would first of all get himself a *fresh* forked and pliable twig, the necessity for a fresh stick will become apparent when I explain *all* his work. He then traversed the field systematically in parallel lines. I followed, carrying a bag of stones; at every spot where the stick reacted I put down stones, if there was any water there the shape of a stream would soon become apparent. But Dr. Robertson maintained it was not enough to say there is water here—dig for it. He studied the geology of the land and could tell them about how deep they would have to dig.

But there were many more fascinating demonstrations of the power Dr. Robertson could wield with a stick in his hands. If he held the fork firmly and pressed the nose on to anything, such as wood, metal or material, the waves of the particular object upon which he pressed the fork appeared to enter the stick; for instance, if he pressed it against an oak desk the stick would respond for some time to *oak* only. If he pressed it against linen or cotton or tussore it would respond to linen or cotton or tussore respectively. The quickest reaction of the stick was caused by an electric fan. I had this power to a certain extent, and if I held the stick too tightly when under the fan it was liable to rub the skin of the palm raw, as it sometimes turned right over. Dr. Robertson used to confound door-to-door vendors with his stick if they tried to sell him brass that was not brass, or linen that was cotton!

I was demonstrating to some friends one day, having pressed the stick on to rosewood. I went round the room testing their furniture. At one table the stick vibrated to the top but not the legs! The friends all laughed and we all agreed it was my amateur efforts which denied the legs, as they said the table was all rosewood. Nevertheless, when the table had to be repaired some time later, the man mending it said to the owner: "Memsahib, this table has teak legs, not so good, Memsahib."

But the most interesting of all demonstrations to me was the power of the stick in what I might call sleuthing people. For instance Mr. Robertson would hold the forked stick in two hands and I would hold on to the nose of the fork for a few seconds, then the stick would only react in following me or where I had stood or sat for any length of time; it would *not* react to minerals, materials or anyone else.

One day Dr. Robertson got an Indian scientist friend of his in to demonstrate this to him. He asked the Indian to hold the nose of the stick for a few seconds, Dr. Robertson holding the other two arms of it. He then left the room with the stick and the Indian walked about, sat down and stood in certain spots. The audience tried to remember exactly what he had done. The room had a stone-flagged floor and was about 25ft. by 18ft. We then recalled Dr. Robertson, who rapidly followed where his friend had been by the vibrations of the stick, and by the intensity or otherwise he could tell where he had stood still, and where he had sat down and what objects he had touched.

Once, when Dr. Robertson had been away for a week, I picked up a stick he had used a lot for divining, and it still vibrated over his chair or near objects he had used a lot. I could not water-divine at all when using a stick he had used, as all it would do would be to follow him! On the other hand, when I cut a fresh one I had a certain amount of success.

Dr. Robertson maintained that many failures were caused by demonstrators not understanding the subject well enough. For instance, they might try and use a stick permeated with some other wave, or they might have a strong reaction over some spot which was not water at all. Dr. Robertson maintained that bones, or lumps of metal near the surface would vibrate the stick. He was once exploring a field to try to find a fresh supply of water where a certain Mission wished to extend their buildings. The stick reacted in a most peculiar manner—though it went down in many places none of these would connect like a running stream. Finally, it was decided to dig one of the these spots, and there they found human bones. They then mapped out the other spots by marking stones and decided it had been a cemetery, which proved to be correct. It was an old leper cemetery, unrecorded and unknown to the Missioners at that time.

Though everyone has not the power to use the stick: for instance, it did not react with his wife even under the fan. We could follow her with the stick when she had held the nose of it, and everyone else with whom he tried this experiment reacted in the same way. That is, all other power left the stick and one could only react with them, ***unless*** they were wearing a gold ring, or one inadvertently went under the electric fan—when switched on, of course.

ARCHAEOLOGY AND DOWSING

BY GUY UNDERWOOD

PART VIII*

FURTHER NOTES ON DOWSING AQUASTATS AND PREHISTORIC SITES

In my last article on this subject I included some further notes on the dowsing reactions. My reason for this was to make clear all the phenomena of dowsing which I have verified by practical investigation and upon which my work on the relation between dowsing and the religion of the Stone Age is wholly based.

Some of these notes had to be omitted, owing to shortage of space, from my last article, and I am now completing them here.

THE PARALLELS

The parallels are weak replicas of the stream band and are found on each side of it, repeating at equal distances, each reaction becoming weaker the farther they are from the stream band until they cannot be perceived further. They provide the most obvious evidence that some oscillating force is involved in the dowsing influence. They could not be produced without wave motion.

The distances apart are, on normal soils, equal to the depth of the stream below the ground, and it is by measuring this distance that the dowser finds the depth. This method is called the Bishop's rule, and has been known and practised for nearly 300 years. I know of no other satisfactory method and, according to my observations, all competent dowsers use it.

The parallels occur only with the positive reaction of the stream band. The negative reactions are not repeated at the parallels.

Many people suppose that because the inner parallels occur at an angle of 45° to the actual stream that the stream emits some " rays " or " waves " and at that angle. I know of no evidence that underground streams emit rays or waves. Such streams appear to cause a line of discontinuity in the electrical condition of the atmosphere vertically above them which is called the " stream band." The fact that the parallels repeat themselves at equal distances until they die away indicates that the primary oscillations causing them are on the surface at the stream band and do not emanate direct from the actual stream.

" STRENGTH " OF REACTIONS

There are two kinds of strength of the dowsing influence, which I distinguish as " perceptive " strength and " reaction " strength.

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* My last article was by a printer's error numbered VIII instead of VII.

Perceptive Strength

This relates to the ease with which a reaction is found by the dowser.

Some dowsing reaction lines are faint and easily missed. This occurs—

(1) Where there is a mere seepage of water
(2) In the case of streams at great depth, and
(3) In the case of the secondary reactions such as the parallels and geostats

Skill is necessary to locate and trace such influence lines. On the other hand powerful streams near the surface have strong perceptive strength, and anyone who can dowse is hardly likely to miss them. Aquastats are fairly easily located by any dowser, but their perceptive strength is not so great as a normal stream.

Reaction Strength

One of the most remarkable of the phenomena of dowsing is the tendency of the rod to make complete revolutions. The number of these varies with each stream or reaction and varies from about two to over seventy.

The number of the revolutions increases with the amount of water flowing and decreases with the depth below the surface. By multiplying the depth in feet by the number of revolutions an index figure can be obtained, and if this is multiplied by a factor increasing with the size of the index the result will give an approximate idea of the maximum quantity in gallons per hour likely to be available. See ***B.S.D.J.*** VI, 44 (1944).

This is the only practical method I know of estimating quantity, and I doubt whether there is a better. It cannot, however, be relied on as a definite estimate, but is a valuable guide to the dowser himself as to whether or not there is likely to be enough for the need of his client. All geologists dealing with water supplies exhibit great reluctance to give estimates of quantity, except in the vaguest terms, and all dowsers would in my opinion be wise to do the same. All that can be said for the method is that it is usually about right within a tolerance of about 20 per cent.

There is a knack in getting these revolutions which I cannot explain, but I think it lies in the ability to release completely all control of reflexes. (See Dr. J. A. Simpson Emslie, ***B.S.D.J.*** I, 3, p. 47, and II, 10, p. 106. After a little practice it comes naturally.

With the negative dowser the revolutions occur very shortly after he has entered and perceived the negative influence, and they become stronger the nearer he approaches the stream band. With the twig held normally they are anticlockwise viewed from the right. Negative dowsers almost all use the forked twig and

by " held normally " I mean held with the palms up. If held palms down the movements are reversed.

The positive dowser should stop still as soon as he has crossed the stream band or other influence line, and the revolutions will commence almost immediately and are usually anticlockwise also. He should hold the rod lightly.

Flow Lines

Most mistakes in the location of streams arise from a confusion of the stream with its parallels. When I first began to investigate I had great difficulty in this and the only method I knew was to take the reaction strength of the supposed stream and of several parallels on each side until I was certain which one gave the greatest strength. This is reliable but takes a considerable time.

There is a better and almost instantaneous method for which I am indebted to Mr. George Applegate, of Trowbridge. He pointed out to me that, after crossing the stream band and on proceeding a few paces, there would be found a single (not triple) positive reaction which is peculiar to the stream band and does not occur with the parallels. What happens is as follows: If after crossing the reaction line and getting the three dips of the rod the dowser continues to hold his rod steadily, then after a few paces the rod will give first a single weak upward kick, then return to level, and then a few paces beyond will give a single and fairly strong downward nod. If it does this he can, in my experience, rely upon having found the stream. Incidentally these flow-lines are the only water reactions which are not triple.

Tuning In

It will no doubt be asked by some readers how the course of a single reaction line can be traced in a complex of other lines as shown on my plan of the geostatic lines at Stonehenge (*B.S.D.J.* VIII, 62) or when rising fissures wind about and cross their own courses, as is not infrequent. The answer is that as soon as the dowser has picked up and begins to follow one reaction line of any kind he appears automatically to " tune in " to that line and to become insensitive to others even of the same nature. No matter how many other reaction lines may cross the one he is following, he is unlikely to be affected by any of them, although if he is careless it is quite possible to go astray. The dowser, if making a plan of a complex site, should never leave the line he is tracing until he has completed it, as otherwise on return he may pick up the wrong one.

It would be interesting to know whether this faculty of " tuning in " has any relation to the ability of fish to find their way in the ocean where they cannot see, or to the homing instinct, or even to that much discussed problem of scent in animals. It is difficult

to put any construction on this phenomenon other than that some wave motion is involved, and it should be of interest to physiologists and biologists.

OLD ROADS AND TRACKS

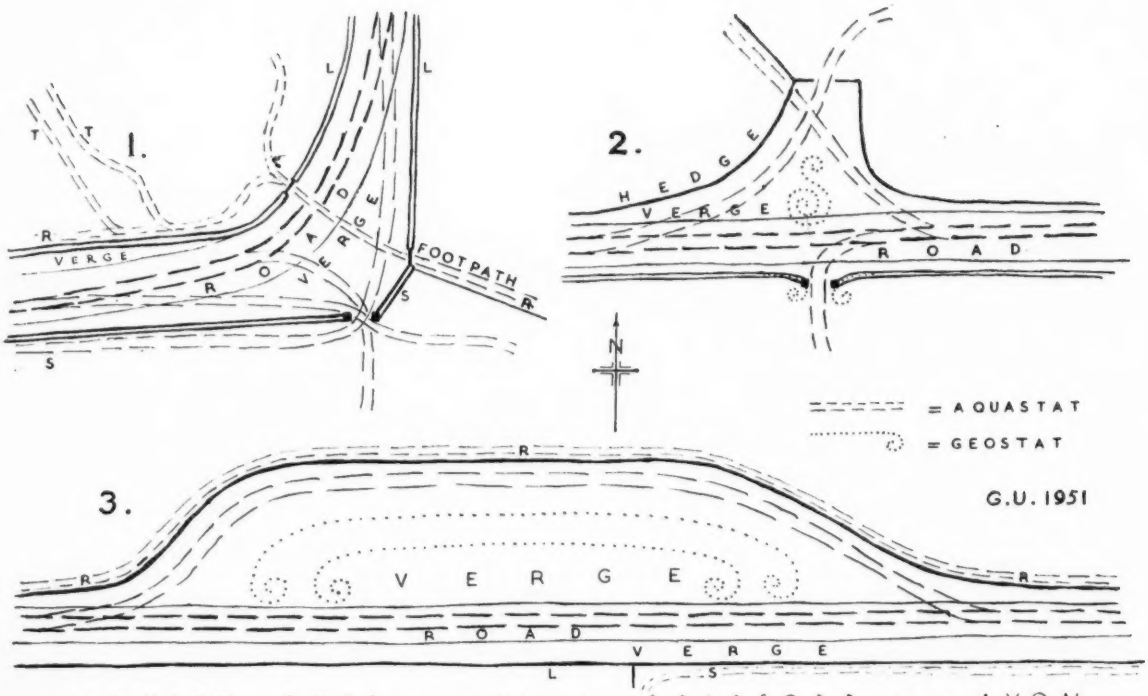
In my last article I described "aquastats," that is to say, dowsing influence lines which have the peculiarity of running in pairs. I pointed out that I thought the ancient peoples may have regarded these double lines as the paths along which Nature had ordained that they should travel, and accordingly they made their roads and tracks between these lines. It is this fact which explains the winding of our old lanes and roads. It also indicates that our roads are far older than one would naturally suppose and that the population of this country must have been considerably greater in the early prehistoric period than is generally estimated.

Most people have wondered why the verges of old roads sometimes widen out to two or three times the usual width and then close in again. This is due to branches or "sidings," which break away from the main aquastat and rejoin it a little farther on. See Fig. 3.

The courses of our hedgerows and other field divisions are also apparently incomprehensible owing to the winding and unpractical lines they take. It would have been easier to have made them straight, and more convenient for their purpose. The reason for this is that they also are aligned on aquastats or on water influence lines. These are usually branches from the main aquastats in the nearest road. Where this occurs the hedgerow itself is set on one of the geostatic lines (which accompany aquastats on each side) and the aquastat runs parallel with the hedgerow. I have generally found that if there is a ditch by the side of the hedgerow it is on the side along which the aquastat or the underground stream runs. Such field divisions when aligned on aquastats are really roads in embyro—approved, their proper course indicated, and ready for use if required.

What is probably the best and most convenient place for any dowser to test the statements I have made as to aquastats and geostats is on any old road or lane. One associates these with the country but there are plenty of them in any suburb, the only difference being that the suburban ones are lined with houses. The investigator should first test on an old road and then on some new road recently cut for a housing estate, &c. He will find the aquastats in the old road and none on the new. He will also be able to find the geostats at the point where the new joins the old and where the old hedge mound used to be.

The illustrations show actual examples of a section of a country lane with widened verges, field entrances and field divisions.



ASHLEY ROAD, WINSLEY, BRADFORD-ON-AVON

The letters R, L and S mean respectively that the ground levels at those places is raised above, level with, or sunk below, the land on the other side of the adjoining boundary line or fence.

It will be noticed that there is a difference in level only where an additional aquastat exists, running parallel with and near to another.

The plans reproduced above show more clearly than can be done by explanation, the manner in which roads were aligned on aquastats, and also a number of other characteristics of the ancient system.

Figure 1.—This shows a sharp bend with footpath crossing, a field entrance and aquastats running parallel with the main aquastat and on each side of it.

The field entrance is unusual, as it is on the crossing place of three aquastats instead of on one as is usual. At such a crossing place I should have expected a barrow. It will be noticed that all the three aquastats branch off the same main aquastat in the road and possibly this is the reason for there being no barrow.

Figure 2.—This shows two field entrances, and a field division aligned on an aquastat. It also illustrates how a geostatic " S " spiral is often produced, that is to say, by the complete enclosure of a small space by aquastats. It will be noticed that this space is approximately equilateral.

The wave motion originating in the primary dowsing reaction lines—water and aquastats—are perpendicular to the primary line. It follows that in the example illustrated three approximately equal forces are meeting in the centre of the enclosed space and it is reasonable to suppose that the geostatic " S " spiral is a line of equipotential. The same of course applies to C spirals in enclosed spaces. (See Fig. 3). If the two aquastats running north into the fields had crossed each other at a point nearer to the main aquastat in the road the probable result would have been two " C " spirals similar to those shown in Fig. 3.

The field entrance south of the road has stone gateposts. In this part of the country this is a sure indication that they mark a place where an aquastat enters the field. Many of these posts are about two feet thick and seven or eight feet in length and weigh nearly two tons. They are in fact megaliths. No one in modern times would for economic reasons go to the trouble and expense of erecting them.

As previously described aquastats produce linear geostats which accompany them on each side and on which hedges and walls were located.

When a linear geostat is crossed, approximately at right angles, by another aquastat, the geostat is bisected and the two ends take spiral form as shown at the south field entrance. These small spirals are characteristic of all ancient field entrances. The linear geostats are not shown elsewhere in order to keep the plans clear.

Figure 3.—This shows a widened verge of the normal type formed by a "siding"—that is to say, a branch leaving the main aquastat and then rejoining it. The resulting breaking of the geostats between them will be noticed; and that the concave sides are towards the shorter, and therefore presumably the weaker, of the aquastats producing them.

Readers are referred to the editorial note following Mr. Underwood's article on page 286 of *B.D.S.J.* 71. The rule for finding depth referred to by him is more suitably described as the rule of the right-angled isosceles triangle and is not necessarily associated with any system of parallels. The effects of anomalies in the sub-soil and on the surface and of vertical objects can be appreciated by any sensitive dowser, and it is reasonable to suppose that the reactions described are due to them. The reference to "ancient people" is too vague to be of any archaeological significance.—EDITOR.

The photographs opposite this page, kindly supplied by Mr. H. G. P. Rees (B.S.D.), of Salisbury, S. Rhodesia, show the strange phenomenon of two rods of different kinds, moving in opposite directions when a dowser holding both together passes along and above a subterranean stream.

The front rod is made of black whalebone and the other of pale blue plastic knitting needles.

In (1), at the start, both rods are pointing vertically downwards.

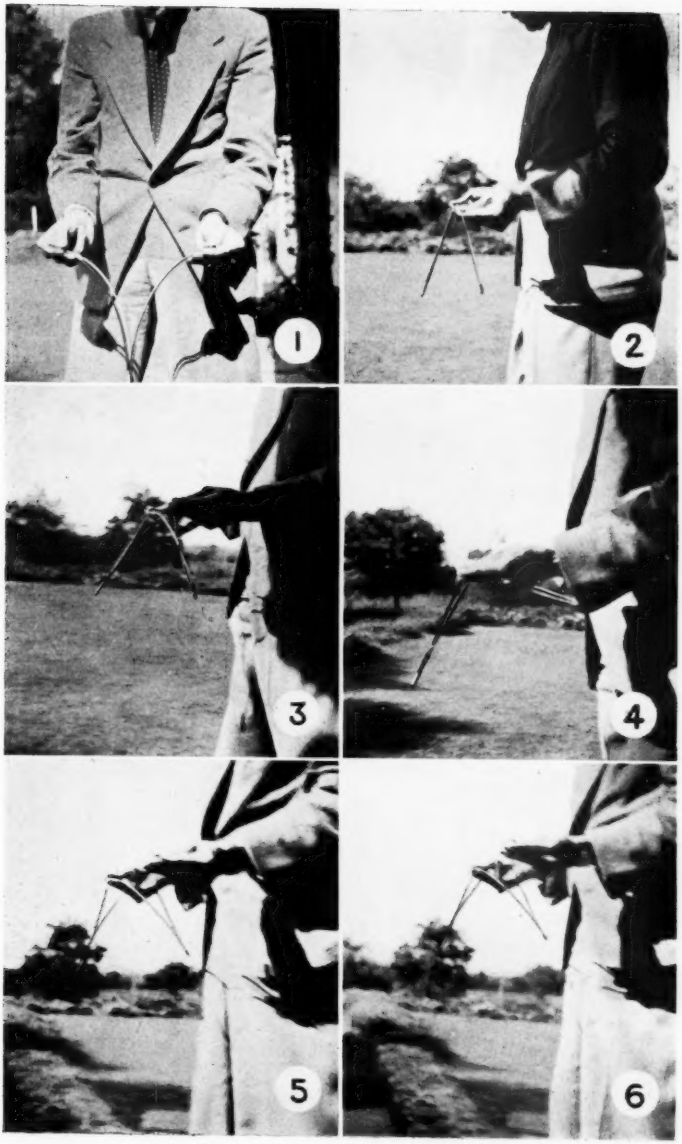
Photographs (2), (3) and (4) were taken while Mr. Rees was walking against the flow of the stream. In (5) and (6) the positions of the rods are shown after a walk of six or seven yards.

In (4) the plastic rod has sprung abnormally owing to its smaller flexibility than that of the whalebone, and to the difficulty of holding it under control after it had moved through a certain amount of arc.

Both rods were lying across the index and second fingers.

Mr. Rees found that the rods used separately moved in opposite directions and that two whalebone rods used together moved forward, even when one, at the start, was on the "body" side of the vertical.

Can anyone suggest an explanation?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PART TWO

NATURAL CURE OF HERNIA

A PERSONAL RECORD SUBSTANTIATED BY SURGICAL EVIDENCE

BY L. E. EEMAN

Reprinted by permission from Health and Life, *June, 1951 (Health and Life Publications Ltd., 396 City Road, E.C.1. Editor: Edgar J. Saxon).*

Many sick people who seek health in "Nature-Cure" only do so after having failed to find it in more orthodox therapies. When their case has been repeatedly diagnosed either as incurable or as curable only by surgery, some of these seekers are much relieved when they recover through the application of simple natural principles.

However, they are rather puzzled when they hear, later, that since their complaint was officially incurable and could not therefore have yielded to nature cure, "they can never have had it at all and that it must have been wrongly diagnosed."

Why is it that whenever an as yet unorthodox therapy heals a complaint which is officially considered incurable, many physicians would rather imply that orthodox medicine cannot correctly diagnose that complaint than investigate the new therapy clinically? Surely, he who admits that he cannot diagnose a complaint, cannot claim to treat it correctly, let alone cure it? Would it not be more rational to say that diagnosis of the complaint being now generally reliable, there is every hope that a dependable treatment may soon be forthcoming and that as a means to that desirable end any therapy which claimed credible success would be investigated clinically by open minds?

Further, where the only treatment deemed effective involves the knife, as with herniæ, or ruptures, would it not be wise to investigate in hospitals any technique for which cures were reliably claimed without surgical intervention? And, all the more so, since an operation for hernia, however skilfully performed, far from being an infallible and permanent cure, is often followed by secondary herniæ, each progressively more difficult than the first to heal permanently by the knife!

Whether or not the authorities of any hospital would investigate clinically a non-surgical treatment for hernia, they might be interested in the account of a case where this treatment was in fact curative. In this particular case, the "escape clause" of mistaken diagnosis does not operate because there is experimental evidence both that the treatment was curative and that a hernia of a specific type had been correctly diagnosed before treatment.

Whilst I was on holiday in Austria in September, 1937, a high spring diving board broke under me and in trying to straighten out before hitting the water I gave myself an awful rick and alighted on my left side. Although under water I felt as if my "guts" had been torn out of me. I had suffered only a right inguinal hernia, the size of a walnut, and a smaller left inguinal hernia. I was then 48 years of age.

In keeping with my theories and techniques, both described in *How do you Sleep?* and elaborated in *Co-operative Healing** I rejected the operation deemed inevitable by most of my medical and nature-cure friends, and I decided to try and heal myself. I gave up all games on which I was very keen, but went on with my work, which gave me some exercise since it involved manipulating patients. Although this exposed me to strain, I had at least three almost complete cures before the war came in September, 1939. However, in spite of complete rest at weekends and periods of relaxation whenever possible during the week, not one of these cures lasted more than six or eight weeks, as some slip or carelessness always seemed to break down an insufficiently toughened mend. In any case, since I had been the only witness of these partial cures, they did not amount to scientific evidence.

"*If I could but relax perfectly.*"

In the last war, in addition to my professional work by day, I became a voluntary District Warden by night, and when peace came the strain I had undergone, in common with millions of others, left me devitalised. I still believed as firmly as ever that if I could but relax perfectly without drugs, find enough vital energy without stimulants, and think the right thoughts without hypnotic suggestion or self-deception, I could get a complete cure inside six months! But my professional expenses being as they were, I could not afford six months absence, and so I gave up the attempt to heal myself, and was operated on most successfully on May 21st, 1946, by an eminent F.R.C.S. The surgeon found: "double direct inguinal hernia, the right hernia being larger than the left. The weaknesses on both sides were re-enforced by an attached strip of fascia. This strip covered the re-inforced weaknesses in the form of a lattice work," wrote the surgeon.

In 1948, again following great strain, I develped a new and "indirect" hernia, consulted my G.P. and my excellent surgeon, and we agreed to have a new operation within six weeks. Meanwhile I applied the technique described in my book *How do you Sleep?* to such good effect that when I went back to my surgeon there was no hernia to be found, and this impressed him so much that he told me with a friendly laugh that "if I could do that

* *How do you Sleep?* is out of print, temporarily only it is hoped, but *Co-operative Healing* is to be obtained from Frederick Muller, Ltd., 29 Great James Street, W.C.1, 15/- net, postage 10d.

kind of thing he would send me his patients with secondaries." This time I felt that we had scientific evidence, for both the G.P. and the surgeon, in addition to myself, could say that I had had a hernia with the usual squelching sounds on pressure, and that it had gone.

In 1949 another period of grave strain produced yet another hernia, which also disappeared as the 1948 one had done, and my conviction that some herniæ were curable by purely natural means, at least in their early stages, gathered strength.

In 1950 I faced a much worse period of strain than any before, and when this was over either a new or an old hernia broke through again, and as even a truss frequently failed to hold it, I suffered a good deal of pain. Unfortunately, my trusted surgeon was away on holiday, and fearing strangulation, I consulted another F.R.C.S. in August, 1950. He reassured me by telling me that " I could safely go for a holiday and be operated on on my return. There was no fear of strangulation, since he could put two fingers through the hole, which would make it easy to reduce the hernia if it came down." Inwardly, I rejoiced at the idea that here I had yet one more competent witness who could one day say that I HAD HAD a hernia, if I could again manage to cure it!

That strange rash : was it the Unconscious Mind ?

Unfortunately, a slip aggravated my condition, and I went into hospital on October 21st, 1950, confident that my surgeon, who had shown great interest in my previous partial cures, would look for evidence of them. I was " prepared " for the operation on Monday, the 23rd, but when the assistant surgeon came to examine me at 9 a.m. on the Tuesday, he had to cancel the operation because I had developed a rash over the critical area!

My psycho-analyst friends declare that my unconscious mind must have produced this rash in order to give me time to cure myself and thus establish the possibility of a natural cure for hernia.

Be that as it may, I determined to make use of this opportunity to heal myself, and I began to concentrate more intently than I had ever done before on relaxation, sleep, the groin, circulation, healing my hernia, and a multitude of constructive variations on the same theme. Further, although no physician has so far been willing to test the efficacy of this practice clinically, I kept my hands linked with the finger tips pointed at the hernia, and my feet crossed, literally for hours on end, whenever conscious, night and day, however hot I became. If one perseveres long enough with this, it eventually produces and maintains a " muck sweat," and in that state it is easy to stimulate local hyperæmia and metabolism by concentration, very much as self-consciousness produces and maintains a blush.

These effects appear to be due to the fact that the body is

bi-polar (right hand positive and left negative in right-handers and the reverse in left-handers) and that energy (vital ?) emanates from the finger tips. This bi-polarity is unconsciously utilised by old, cold, sick and devitalised people whenever they link hands, then invariably breaking the circuit as soon as they feel too warm. It is this tendency to " break the circuit " that must be resisted at any cost if one is to get significant results. I underline this assertion, knowing that it may expose me to ridicule, but I must face this possibility if the technique is ever to be given a clinical test in a hospital.

After a week in bed, my rash having subsided, I was once more prepared for the operation, only to produce a worse rash than the first, with the result that the operation was put off once again. By the time I had practised my self-cure for ten days, I found I could no longer make my hernia protrude. Within a few days two surgeons, and one doctor also, failed to find any hole. They all asserted that a hernia in which one could put two fingers could not be cured and must still be there although they could not find it. There was only one solution: open up and see, and get real scientific evidence both about the nature of the hernia and the extent of its cure, if any.

The operation was performed on November 16th, about three weeks after I had begun my " nature-cure."

" It was for an indirect inguinal hernia. This hernia had entered by way of the inguinal cord at the site of which there is a congenital weakness. The site of the original weakness operated on in 1946 was completely sound " wrote the surgeon. After the operation he had said that " on opening the sac he had found its neck so reduced that one could only have forced through it a knitting needle at the most ; that no gut could have passed through such a small opening ; that since so much had been done in three weeks, another week or ten days would have completed the cure, although without an operation no one would ever have known what had actually happened ; and that it had all been a remarkable experiment."

I trust this has been an accurate description of facts. Scientific evidence is ample, both that there was at least one hernia, of a specific kind and size, and that it was almost completely cured BEFORE surgical intervention. Verification of facts by an exploratory operation is conclusive and it leaves nothing to the imagination.

Does this case alone justify a clinical investigation of a technique in a hospital ? Of course not. But for over 30 years I have hoped that a method which never involves any risk to the patient and which has cured MANY " surgical cases " would be so investigated. This hope is strengthened by the fact that most great surgeons assert that they operate only when no other therapy appears to be effective or even possible.

MEDICAL RADIESTHESIA

BY L.R.C.P., F.R.C.S. (ED.)

Reproduced from Humanity Now *of Spring, 1951, with the permission of the Editor*

Dowsing for water was long looked upon with incredulity and scorn, or explained away as being a form of black magic. It is now accepted by the majority of people as a perfectly normal and ordinary method of detecting the presence of underground water, or even of oil and metals.

Medical radiesthesia, though a development from dowsing, is in somewhat the same position in the eyes of the orthodox as dowsing was a quarter of a century ago.

All human beings, and indeed all animals and most things in the world, give off vibrations.

In the case of human beings these vibrations can be measured and afford an index to the general health of the body or of individual organs; and radiesthesia is a general term covering the various methods by which this can be accomplished.

Use of the Pendulum

This article is concerned with the use of the pendulum for this purpose.

The pendulum can be used directly over the body, or, as is more usual, indirectly by working with "Samples," i.e., specimens from the patients concerned in the form of a spot of blood on white blotting paper, or a little saliva or urine on a swab of cotton wool—though most operators prefer blood spots as being more reliable.

The information to be obtained from these samples is independent of the age of the sample or in what part of the world the patient is. Moreover, and what seems at first sight so incredible, the information received is that produced by the radiations given off at the time of examination and not those given off at the time of taking the sample.

This is simply because the sample acts as the receiving end of a wireless set which is tuned into the transmitting station constituted by the patient.

By impregnating a series of tubes of starch with the appropriate "wave-lengths" (how he gets it is his secret), Turenne, the French engineer, has produced a most comprehensive set of "witnesses," which represent the different organs of the body, the diseases to which mankind is liable and the foods, plants, &c., to which he may be allergic. Experience has proved that

most of these witnesses are absolutely reliable if used with intelligence and a certain caution in interpretation.

By balancing these witnesses against the sample any want of harmony or equilibrium can be detected (this can conveniently be referred to as "imbalance") and a diagnosis established.

The actual method varies (too much so, unfortunately) with different operators, but whether rules, circles, triangles or special measuring instruments are used, the principle of finding the balance remains the same. Incidentally, Radiesthesists dislike "blind" swabs or blood spots, i.e., samples without details of signs and symptoms, as it wastes so much time and is a great handicap to both diagnosis and treatment.

Value of the new Methods

Now what is the advantage of this somewhat esoteric method; a method which must come under the heading of extra sensory perception until explained by the scientists, as up to the present time no instrument has been invented which eliminates the human element?

The diagnosis and treatment of acute conditions have made spectacular progress in the last two or three decades, but the same cannot be said of chronic disease—far from it.

Admittedly, the average span of life has been greatly lengthened owing to the aforesaid control of acute ailments, the elimination of many forms of infectious disease, better public and private hygiene and better all-round nutrition, &c., but what about average health? How many of our friends and acquaintances are without some complaint or malady? These no doubt are trivial in many instances, but far too many people are enduring real suffering or infirmity for want of accurate diagnosis, and treatment based on knowledge of that diagnosis.

If you do not know the basic cause of an illness you can only treat it empirically, at worst by suppressing symptoms and causing more serious ones to appear elsewhere, or, at best, by affording temporary relief by physiotherapy, the administration of the ubiquitous aspirin group, the barbiturates, or even the deeper-acting drugs such as morphia.

There is every indication that radiesthesia can fill the gap between the inception of disease and its progress to the point when it gives the ordinary indications of its presence either by clinically obvious signs or symptoms, or by ordinary laboratory tests; and, moreover, that it can supply an explanation of such signs and symptoms as have hitherto been unexplainable by orthodox methods.

Two great Pioneers

One hundred and fifty years ago Hahnemann, the great Homoeopath, preached that one should treat the whole patient,

mental and physical, and not just one particular sign or symptom, evidently having in mind that in every case there must be some underlying cause responsible for the whole complex.

Another pioneer, also ahead of his generation, Mr. J. E. R. McDonagh, F.R.C.S., has for the last forty years insisted that, looked at broadly, there is only one disease, by which, to put it very shortly, he means that if the blood protein is out of order, i.e., if the molecules of protein in the blood stream are in a state of "imbalance" there is disease, the manifestations of which vary according to the particular portion of the protein affected. Mr. McDonagh's theory would need a special article to itself, but he regards blood protein as consisting of three main portions, each representing one of the original divisions of the embyro from which the main groups of the organs and tissues of the body developed, and according to which portion is affected by toxin or other adverse conditions, so will the manifestations of disorder be located.

The aim of treatment is to redress this imbalance of the protein, primarily, of course, by, if possible, removing the cause, and then by the exhibition of the appropriate remedies or other forms of treatment.

By providing a definite basis and plan for investigation this theory can be of very great help to radiesthesia by enabling the operator to decide which part of the body is chiefly at fault, and, much more important, by helping to find the basic cause or common denominator of the general or particular protein imbalance.

The pendulum has served to prove that it is very rare indeed to find only one organ or endocrine affected, and that McDonagh's theory is a most rational and practical basis for both diagnosis and treatment, and, further, that unless you *can* redress that imbalance you will, at best, only be rendering temporary help to your patient.

As homoeopathy has proved to be of so much more real service in chronic disease than orthodox remedies, the indications are that radiesthesia and homoeopathy will advance hand in hand, the one helping and proving the other, with the promise of ever increasing progress in the diagnosis and relief of those long-standing troubles which affect so large a proportion of our fellow-creatures and which are often dismissed so summarily as being imaginary or due to "nerves," and get neither sympathy nor understanding.

Future of Radiesthesia

The practice of radiesthesia is not easy. Many people have the gift in embryo, but it takes many months of hard work and application to develop it fully and to an extent which produces really trustworthy results.

It should be grafted on to a full medical training and combined, when possible, with clinical examination. Unfortunately, so few medical men have so far taken it up that its development has mostly been in the hands of medically unqualified persons, but we must be very grateful to them for the possibilities they have opened up.

Its development is also hindered by the fact that most radiesthesists are ploughing a rather lonely and individual furrow, and very few are familiar with McDonagh's unitary theory, a theory which would help their work enormously and would form a foundation for uniformity and progress unlikely to be achieved by any other means.

From the point of view of treatment the pendulum should become a great stimulus to the science of Homeopathy.

At present the teaching of Homoeopathy lacks uniformity and has to rely too much on retentive memories and the use of cumbersome repertories.

The question of potencies (i.e., the dilution of the drug—the power or strength being, roughly speaking, in inverse proportion to the dilution) is also a vexed one and one which constitutes a great difficulty in teaching, and an almost greater one in accepting, homoeopathy. The pendulum will choose both drugs and potencies with amazing speed and accuracy and renders this encyclopædian knowledge of the details of an enormous number of drugs unnecessary.

An article such as this cannot pretend to furnish more than a very brief and superficial exposition of the science and scope of radiesthesia, but it is hoped that enough has been said to arouse interest and to indicate in some small measure its possibilities for the advancement of the healing art and the alleviation of human suffering.

It should be added that this article is founded on the personal views and experience of the writer.

RADIESTHESIA AND MAGIC

BY MRS. KINGSLEY TARPEY

In April I was recovering from a bad attack of Influenza, and I was having a course of massage from a highly skilled masseur. I had suspected already that he might also be a healer, and during this course I took some biometrical readings on the Bovis Biometre of his thumb and my own. I was surprised to discover that the two measurements recorded an exactly equal rise in operator and patient.

I had been able to resume work myself again, and from this time I took my own measurements before and after every treat-

ment. I discovered that instead of losing power after giving quite a number of tests and demonstrations by contact treatment, I had actually gained. Beyond a natural bodily fatigue there was no sense of exhaustion. I thought this discovery so important that if it had not been too late already I should have sent a note to the *B.S.D. Journal* for June. I had often used the explanation of the late Dr. Dudley Wright that I was a " Channel and not a Reservoir " without realising all the implications. The explanation came to me accidentally and was a revelation.

Through the help of that very efficient organization, the Biotechnic Press, which supplies books that are beyond the range of most lending libraries, I have been able to study during the past few months a number of books hitherto beyond my reach, dealing with the special branch of Radiesthesia in which I am interested. I have been led to make a comparison of some of my own experiences with the discoveries made by scientists into the " magic " cures and influences in the South Sea Islands which have been under investigation and observation recently. It was a revelation to me that the " force " which has had such tardy recognition among orthodox medical students and other scientists in the western hemisphere should have been in operation, and achieving miracles, on the other side of the world, perhaps for thousands of years !

The most revealing of the books I have read on this subject is *The Secret Science behind Miracles*, by Max Freedom Long, with whom I have since been in correspondence. He uses, of course, the phraseology of the Kahunas, or witch doctors, and accepts the division of the personality into three selves, which might be described, to make a very free translation, as—

(1) our own consciousness, depending on the senses,
(2) the subconscious mind, and
(3) the Psyche or spiritual part, in which conscience, religion, and the higher human attributes may be said to reside.

In a perfect union of healer and healed, on either side, these three must be brought into complete harmony. It is in this fusion of power that miracles may be performed, and it must, I think, be rare, at any rate among modern healers. Among the ancient Kahunas, who, it would appear, commonly performed miracles, it would seem to have been the accepted climax of their ministrations.

It is a great pity that the practice of magic, under the influence of the white intruders, became illegal in the Islands. It will take more than the sympathetic investigations of a handful of modern scientists to restore the confidence of the inheritors of the gift, if any such there should be. And, by whatever names you call it, the gift of healing by touch does not flourish well in a hostile atmosphere, either here or in the South Seas.

PART THREE

DISTANT PROSPECTION

BY A.H.B.

This article is a brief account of a remarkable book called *Henry Gross and his Dowsing Rod*, by the well-known author Mr. Kenneth Roberts, which was published by Doubleday and Co. in the U.S.A. early this year.

Mr. Roberts is best known in this country as the author of vivid and outspoken novels on American history, but having been interesting in dowsing for several years he has written this account of the exploits of a dowser, Mr. Henry Gross, who possesses in an exceptional degree the ability to give accurate predictions regarding the presence of underground water at considerable distances.

Mr. Roberts (whom I will call K.R.) has studied the literature of dowsing to good purpose. He has included in this book an article by Miss E. M. Penrose (B.S.D.) which appeared in *Blackwoods Magazine* for September, 1932, describing her experiences as an official water diviner in British Columbia, and also a chapter from *Traité de Métapsychique* by the late Charles Richet (1850-1935), Professor of Physiology at the University of Paris and a Nobel prize-winner, dealing with the nature and causes of the dowsing phenomena.

K.R. is the owner of an estate called Rocky Pasture at Kennebunkport in Maine and made the acquaintance of Henry Gross, a game warden of Biddeford, who happened to be a supersensitive dowser, when developing the water resources on his property.

Henry Gross (whom I will call H.G.) was born in Laurence, Massachusetts, about 1895. When he was three and a half years old his family moved to North Salem, New Hampshire. H.G. started his career as a dowser when a schoolboy of twelve. The school at North Salem had no water supply and when it was decided to remedy this situation, H.G., who had learned to dowse from an old man of 80 called John Dustin, volunteered to locate a spot for a well, with results which were entirely successful.

Six years later he moved to Biddeford ; his reputation followed him and his services were much in demand.

K.R. first came across him in 1947 when forest fires were threatening his estate, and he wanted to make a pond. At that

time he already had nine wells all located by divining and each location corroborated by three dowsers. H.G. was then 52 years of age and had been dowsing for 40 years. With amazing speed he found a spot where three veins met, gauging the depth at 5 to 6 feet by the strength of the pull. Next day a bulldozer duly revealed the three trickles.

At this time the technique employed by H.G. was of an elementary kind. He used a rod cut from a local tree, and though extremely sensitive was unable to give a close estimate of quantity and could gauge depth only by strength of pull. In 1948 he studied some of our journals which had been sent to K.R. as a result of correspondence between him and the President B.S.D., and began to make experiments in methods hitherto unknown to him. He discovered the selectivity of the rod in reacting to an object similar to one with which the rod had been in contact. He also made acquaintance with the pendulum and learnt how easily the dowser was affected by telepathy and suggestion. His experiments led to the discovery that he could by questioning the rod, that is by interpreting a dip as " Yes " and no movement as " No," arrive at accurate estimates of depth, flow and quantity of underground water.

An offshoot of this discovery was that what he called a vein was not, as he had supposed, an underground trickle emanating form a far-off river, lake or pond, but one of a number of small shallow streams issuing in various directions from a single column of water rising from deep underground, which he called a " dome."

As a result of an article by K.R. published in the *Boston Traveller*, he was asked to arrange a meeting of a few dowsers at which their activities could be studied by Dr. Gardner Murphy, head of the American Society for Psychical Research, and several others. The meeting took place in August, 1948, but, as usually happens in experiments arranged by psychical investigators, the tests had no relevance to dowsing as a practical operation, and the only redeeming feature was the discovery of Mr. Prideaux, assistant editor of *Life*, that he was himself a sensitive dowser, a discovery which led him to publish an article about dowsing in his magazine.

On returning from one of his periodical visits to Bermuda in January, 1949, K.R. was amazed by the implications of the news H.G. had already sent him by letter, namely, that he could dowse a locality without any information except the name, or the name of the person who owned it, and could arrive at the exact position of an underground vein, its depth, flow and quality, merely by asking a series of questions. During the summer H.G.'s services were much in demand for finding water and occasionally other objectives such as an outboard motor lost in deep water

the previous year, and numerous examples are given of the accurate predictions obtained in the first place by questioning the rod when sitting in his own home.

Though uniformly correct on water, on minerals and other things H.G. was by no means so accurate, probably owing to inexperience and disturbing effects such as *rémanence*. He also failed in the prediction of the sex of unborn children, not having at that time adopted a suitable technique.

In October, 1949, the tests by Professor Rhine briefly described in the last journal, were carried out. During a conversation at dinner discussion had turned to the water situation in Bermuda, and H.G. was puzzled to hear that the only fresh water in those islands was derived from rain. After dinner a small scale map of Bermuda was produced, and H.G. lost no time in locating, at a distance of 800 miles, three domes of potable water and one in which the water was contaminated. The positions of the domes were marked on the map (reproduced in the book) and a note of the locations with the date (October 22nd, 1949) written on it and signed by Kenneth Roberts.

When a few days later K.R. arrived in Bermuda to continue work on his novel he found that owing to lack of rain in 1949 the water situation was very serious. The possibility of finding supplies of fresh water had been persistently discredited by geologists, and a well sunk by the Royal Highlanders 100 years before contained no trace of water. But K.R., who had no reason to respect the opinions of geologists, realised that here was an exceptional opportunity for exploring the possibilities of distant prospection and telephoned Sir Stanley Spurling, who was associated with many enterprises in Bermuda. Sir Stanley was enthusiastic in spite of the fact that an attempt to find fresh water by a friend of his, Sir Howard Trott, on the indications of a German water-locating instrument, had been a costly failure, and promised to assist with drills and workmen.

On this assurance K.R. sent for H.G., who arrived in Bermuda on December 5th, 1949. Working on a large scale map of the islands he found the positions of the four domes with greater accuracy than had been possible on the small scale map on October 22nd.

The shape of the group of about 360 islands called Bermuda* somewhat resembles a large hook lying on its side in a position NE-SW, the end of the shank being NE, and the point of the hook on the north side of the shank. Geologically it consists of Aeolian Limestone. Of the three domes of fresh water which H.G.

* Incidentally, Bermuda is mentioned by Shakespeare as "The still-vexed Bermoothes" in *The Tempest*, Act I, Scene II.

had located one was near the end of the shank on War Department ground, in St. George's Barracks. The next was about six miles down the shank in Smith Parish and came to be known as Jennings, whilst the third, about a mile further on, in Devonshire Parish, was called Clayhouse.

On December 6th K.R. proceeded to investigate the positions of these domes with H.G., and found them to be where they had been located on the map in Kennebunkport, but the details regarding depth, yield and number of veins differed considerably.

The first dome to be exploited was that at St. George's: digging was started on December 7th and, after much delay caused by the inability to procure a drill, was continued on January 30th. Water was found on February 11th at a depth of 81 feet, three feet below sea level, and on being tested by a pathologist proved to be of excellent quality, to the triumphant satisfaction of K.R. and his associates and to the disconcertion of those who had always maintained that fresh water was unobtainable. Much difficulty was experienced in obtaining a suitable pump, and it was not till February 18th that a pump delivering only six gallons per minute was installed, so that the yield of the well was never fully tested.

The next dome to be tackled was Jennings, and after much irksome delay the drill was eventually installed there. But owing to the time which had elapsed since the site was marked by H.G. on December 7th, the exact point at which the drill should be set up had been obliterated, and when drilling was started on March 7th it was probably a few feet off the centre. Anyhow, the water when reached at 64 feet was found to be somewhat saline—275 parts of chloride to 100,000 parts. (Sea water contains 1,000-1,100 parts).

For some time attempts had been made to procure an efficient pump, but it was not till April 10th that a Deming deep-well pump was at last available.

It was now the turn of the third dome, that known as Clayhouse, and on March 20th drilling was started. It was fortunate that at this site the centre point had been fixed by cross bearings, otherwise the same mistake might have been made as at Jennings. Three days later water was struck at 77½ feet, which was below sea level. The bore was continued to 80½ feet and the water when tested showed only 12.5 parts of chloride.

This happy result encouraged K.R. to try a new bore at Jennings, and another point was chosen on the advice of two local amateur dowsers. The result, however, showed that this point was even further from the real centre of the dome than the first—and so this dome still awaits a bore in the true centre line.

The deep-well pump having now arrived was transported to Clayhouse and, after the tiresome delays which seem inevitable in Bermuda, pumping was started at Clayhouse on April 27th, 1950, at the rate of 44 gallons per minute. It was continued for 73 hours with undiminished flow and was then stopped as a guard had to be kept over the pump day and night.

A test of the water made at Boston showed a pH of 7.3, and bacillus coli at less than two in a million, though the chief Medical Officer of the Bermuda Board of Health tried to make out that the water was contaminated.

K.R. returned to Kennebunkport in May, leaving it to the authorities in Bermuda to make use of the heaven-sent supply of fresh water which his insistence and courage had been instrumental in revealing.

During his stay in Bermuda H.G. had on December 12th made a distant prospection of a property in Saxtons River, Vermont, belonging to an old friend of K.R.'s, Mr. Brooks Shepard, so on his return K.R., accompanied by H.G., Professor Horace Levinson, an eminent but exceptionally broadminded scientist, and Miss Claasen, proceeded to test the prediction on the spot. The junction of the veins was indeed located as predicted, and though a well was for convenience made at another spot, the reality of the reverse process, that is the location in the U.S.A. of water from Bermuda, was shown to be feasible.

During the summer of 1950 H.G. never went anywhere to locate water until he had first dowsed the property at his home in Biddeford. Several descriptions are given in detail of the extraordinary accuracy he achieved. By the time autumn arrived K.R. and H.G. had made 42 dowsing expeditions, and 42 wells and ponds had been successfully dug. K.R. writes: "In my long association with him, I never spent a day in his company without seeing him do something astounding, and of benefit to some needy person—something that, lacking the assistance of his rod, probably could never have happened."

Several distant prospections on a large scale were made which await verification, for instance, three domes in the Island of New Providence, better known as Nassau, a vast dome of water in the Atlas Mountains, three domes in Capri, three domes on the summit of Mount Washington, New Hampshire, one of which, if developed, could supply water by gravity to buildings now supplied by pump from a source 3,100 feet lower down.

To protect H.G. from exploitation and to ensure that his services are properly remunerated, a company has been formed and incorporated, called "Water Unlimited."

LETTERS TO THE EDITOR

51 Av. Ém. Béco-Bruxelles.

23rd of June, 1951

Dear Sir,

I believe it to be of interest to your readers to relate briefly the circumstances of a cure due to " Eemanism."

During the whole of one night, about 24 hours after being vaccinated against smallpox, I suffered most violently at the back of the neck, undoubtedly as the result of an attack of the bone-marrow by the toxins.

In the morning I called for the help of a friend who was well conversant with Mr. Eeman's co-operative healing method to try to relieve me, at least in part, of my pain. Within 10 minutes at the most of being placed in " parallel " circuit with my partner, I fell into a deep sleep, to wake after about an hour, completely freed of my pain. But my partner felt exactly at the same point the same kind of pain that had been mine during the whole night (but fortunately without the same danger attached to it !)

Yours sincerely,

L. KEFFLER, D.Sc.

Bourton-on-the Hill,
Moreton-in-Marsh.

May 29th, 1951

Dear Colonel Bell,

As a post-script to my paper on "Radiographic Prospection for Underground Water," reprinted from *Proceedings* of the London Congress in *B.S.D.J.* IX, 71, March this year, may I add the following brief note on a means of ascertaining the *direction* of flow of water in a pipe or vein ?

In Chapter V of *The Physics of the Divining Rod* (see especially pp. 228-9 and also pp. 100-01 in chap. III) means of estimating apparent direction of flowing water were indicated, though there had to be certain reservations : the reaction strength to the flow field normally being greater when facing up-stream with rod, myometer or even automatic instruments. But it was thought that this effect might sometimes reverse if and when the " polarity " of the field was inverted, or " negative."

The other day, while taking field strength measurements on several flows (both piped and natural) by measuring the mean width of the primary flow band over the moving water, as ex-

plained in the paper referred to above, and using a strong bar magnet over and parallel to same in order to keep the field in its " positive " (minimum width) phase ; it occurred to me that one ought to get slightly different *width* values when facing up or down stream respectively.

This was, in fact, then found to be so, provided one kept the field magnetically stabilised, as explained above, and also took care to maintain a constant rod and muscle tension while side-stepping across the reaction band, facing first up and then down the flow, and coming up to the outer margins very cautiously from the outside, with the nearest arm in tension, as primary detector.

In other words, just as one can get appreciably different values for field (or reaction) strength in the two opposite directions when using the other methods mentioned in our book (*loc. cit.*), so, too, in the case of the present method. The two way distinction amounted to about 1/4 to 1/6 of the total band width in the few examples just employed, but the velocity of flow may also be found to affect the ratio, I think, if and when sufficient cases are investigated. The difference in the average readings in either direction would appear to result from some sort of screening action of the dowser's body, if not also to the fact that certain main nerve centres, such as the solar plexus, eyes and fore-brain, are on his *ventral* side ; though unscreened and directional pick-up by the forearms alone may be sufficient explanation.

Yours sincerely,

J. CECIL MABY

Pinehurst,
Hillbrow,
Liss, Hants.

June 14th, 1951

Dear Colonel Bell,

I was very interested in Mr. Noel Macbeth's article in the June *Radio-Perception*. Perhaps a single animal experience of my own might be of interest to your readers.

In the autumn of 1949 I received an S.O.S. from a friend, Mrs. R.S., to try and cure her child's pony. It had fistula of the withers and had been condemned by the vet. on the grounds that a cure, if possible, would be long and expensive. I left the district in 1946 and have not seen the pony since. Fortunately I am sufficiently sensitive not to require any appartus, direct contact with the patient, specimen of blood, an abscess, &c., and memory of the patient is a sufficient link. My work

has always been with human patients, but this case seemed comparable to a human ailment and I agreed to take it on. The first test showed that it was microbic, and using a germicide I have found very effective for humans I prescribed exposure to the light of an ordinary rich blue 60-watt lamp for 5 to 6 minutes twice daily. The microbic condition was indicated as cleared in three weeks and the light was stopped. Concurrently with this I prescribed extra food consisting of a little oats and black treacle or molasses, whichever was available. An internal remedy consisted of 2 or 3 saltspoonsfuls of the following powdered herbs, mixed in equal parts: Tormentil (*potentilla tormentilla*) root; Valerian (*valeriana officinalis*) root.

Treatment started about November 28th, 1949. The swelling was reported to have burst about March 11th, 1950. A different vet. was called in and lanced in a different place, but Nature preferred her own way, healed up the incision and continued the discharge from the original spot until about May 1, when the discharge stopped. The opening rapidly healed and during the summer the pony was reported to be so fit that she was walking off with prizes.

Yours sincerely,

O. H. BROWNE

6 The Vale,
Golders Green,
London, N.W.11.
August 14th, 1951

Dear Sir,

It has come to my notice that resentment has been caused by my use of the word "spurious" in connection with dowsing, in a review published in the *Journal of the Society for Psychical Research*.

Certainly I had no intention that this epithet should imply "counterfeit" or "fraudulent." In normal scientific usage a "spurious phenomenon" is one in which a collection of observations points to a conclusion which is later found to be erroneous—an artefact. A scientist might easily use the word in describing a facet of his own work.

I am anxious to make this clear because I feel that friendly relations between psychical researchers and dowsers, and between the two Societies, are all-important if any satisfactory future research is to be carried out.

Yours faithfully,

DENYS PARSONS

REVIEWS

RADIATIONS DES FORMES ET CANCER

By Enel. Editions Al-Maaref, Cairo, 1951.

The author of this book has made a special study of cancer from the point of view of radiesthetic treatment. The book is divided into two parts, the first dealing with radiesthetic principles and the second with cancer treatment. The author uses the P.U. (Universal Pendulum) of Chaumery and Bélizal, and has investigated very thoroughly the phenomenon of colours in radiesthesia. In fact he has used colour frequencies in his therapeutic practice, but recognises the need in a particular case of utilising a pure colour, corresponding with a single spectral band. He considers many of the radiesthetic appliances on the market as useless or redundant and describes three simple ones which anyone can make, including a biometer and one working on the disk principle. The third is a squared diagram of Dr. Naret's. He does not think the use of amplifiers in such appliances is of any value.

Tap water, the author finds, responds to only one colour as set on the P.U., while rain water contains all the colours of the spectrum, having full vitality. He describes how tap water in a glass can be charged very simply to full vitality. He has found Green-Negative of potent use in treatment, which is produced by certain statues of antiquity and ritual objects. Identical objects giving out this radiation can be combined to form a battery, or pile, whose radiation thus becomes very strong. It is in general unsafe to use more than four of these objects, as the radiation may become damaging to human tissue. A battery of pyramids, one placed over the other, it a potent means of desiccating meat.

For both diagnosis and treatment (at a distance) the author strongly favours anatomical charts and sketches, so that the trouble can be pin-pointed from either point of view. He describes simple apparatuses by which he can produce any required colour frequency. In carrying out treatment a witness of the patient is connected to a sketch of the affected part (thus obviating irradiation of healthy tissue), and the sketch is then subjected to the appropriate radiation. Sometimes different sections of the same organ require different colour frequencies. The patient's vitality and progress are measured on the biometer. It should be made clear that when using colours, it is not the colour *per se* which heals, but its respective frequency of radiation. There are objects which radiate the frequencies of the whole spectrum, from which all but the wanted frequency can be filtered.

In Part II the author reviews in brief various methods of diagnosis and treatment of cancer, including radium, X-Rays, diathermy, Lakhovsky's oscillators, Abrams's method, homoeopathy, hormone treatment, isotopes, and so on. In consonance with various authorities (whom he quotes) he considers cancer to be due fundamentally to disequilibrium of cellular tissue, and asserts that there is no need to look for a microbe or a toxin as the cause. Cases are described where cancer patients were treated to good effect with the radiation of Green-Negative, and it is stated that where the cases were not cured, there was always an arrested development of the disease and avoidance of pain. A number of cases are given.

Naturally earth radiations find their place in this book, and the author puts the increase of cancer down (at least partly) to our civilised way of life with our complete plumbing systems (with their inevitable underground drains) and electrical installations. But assuming these underground radiations produce cancer (often after many years living in one place), surely it is right to attribute to them also in some degree the toxins which precede it, cancer being the final response to impaired function and general toxicity.

V.D.W.

JOSEPH TREYVE

by Dr. Ed. Laval. Les Eiditions de l'Ermite

This little book of 46 pages is an appreciation of the personality and work of the late Joseph Treyve. He was primarily the proprietor of a well-known horticultural establishment at Yzeare, near Moulins (Allier), but a greater renown attaches to his name by reason of his remarkable powers as a "distant" radiesthetist. Starting as an ordinary dowser for water he soon learnt that his pendulum would respond to a multitude of questions without the necessity of his actual presence at the place concerned and that any sort of connecting link such as hair, map, photograph, was effective.

The first time the author met him, in 1932, he was comfortably seated at his desk where he usually carried out his prospections. He attributed his reactions to some sort of emanation, and he used, in conjunction with the pendulum, an apparatus including a lamp and a compass, called by him *l'effluviographe*.

The author gives examples of his discoveries under the heads of subterranean water, minerals, vegetables, animals, persons, lost or stolen objects, distant objects, dreams, archaeology, to the number of 44 and also a successful experiment in prediction in which the late Dr. A. Carrel took part.

The epilogue describes how his son Francis is following in his footsteps.

A.H.B.

REVUE INTERNATIONALE DE RADIESTHÉSIE

No. 24

This number starts with instructions regarding another competition in teleradiesthesia, namely, the location on a plan of a bottle of oil and some buried gold.

Un Maitre de la Radiesthésie parle aux Lecteurs de la R.I.R. The record of a lecture by the Abbé Bouly; a translation is printed in this journal.

Bulletin Autonome de Radiesthésie humaine. No. 5, Le Témoin. by Maurice Le Gall. This is the fifth of a series. In it the author gives his views on the question of *témoins*—which on the suggestion of a well-known mining engineer we have always called "samples." He distinguishes seven types, (1) Specimens of the object of search, (2) Impregnations such as saliva, blood, &c., used for medical purposes, (3) Objects which retain the emanation of a human being, (4) Colours, (5) Written samples, (6) Photographs, (7) Mental images.

He points out that the same word is used to denote a specimen of the object of search; a particular object used for the discovery of a

definite thing of a different kind, e.g., a tie for a missing person; one of a number of different substances to act remedially for a known disease.

Discussing the mode of action of the seven types he considers that in (1) the efficacy of the sample is subordinate to the thought of the operator. He does not rule out the possibility of a physical effect, but the decisive factor is the thought in the dowser's mind.

In (2) and (3) the samples, though not of the same nature as the object of search, appear to act as a guide to the dowser's thought. In (1) the sample defines the object, in (2) and (3) it serves as a general indicator, and acts, in the language of occultism, as a "support." Dowsers often make mistakes by using a sample of a general kind for a particular objective. For instance in searching for a lost gold ring the dowser's thought should not be "I am looking for gold," but "I am looking for a gold ring which belonged to ——." As regards (4) he considers that the value of colours is purely personal and that they are less reliable than specimens or "supports"; (5) "written samples" facilitate the mental visualisation of a, possibly, cumbersome description; their effect is entirely mental. (6) Photographs act as the most convenient and least fatiguing support for the dowser and their action is entirely mental; it is idle to attribute their effects to any sort of radiation; (7) likewise there is nothing radiesthetic about a mental sample.

The use of the term *témoin* or sample for one of a set (*trousse*) of disease specimens is out of place as it constitutes the objective in itself.

He concludes that the action of a sample in radiesthesia depends on the value attributed to it by the dowser, that is to say, that a specimen of a certain kind, say quinine, will produce the effect of a specimen of another kind, say aspirin, if the dowser believes he is using the latter. The idea of syntonisation is fallacious.

This is very briefly the theme of M. le Gall's discussion, but it may be observed that he does not appreciate the far-reaching effects of the distinctive wave-forms emitted by matter in general, including the human body and its products—effects which enable diseases to be treated by radiation of the appropriate kind over long distances, giving strong support to the idea of syntonisation.

In an article under the heading *Radiesthésie Agricole*, Baron Dorlodot discusses the importance of ionised salt in the food of animals.

Recherche des Eaux Souterraines. M. M.-G. Nicolas describes how at a meeting of radiesthetists the same results were obtained in estimating depth and quality by the psychic (*sic*) method of foot beats as by the method he uses which is based on a consideration of the spectrum thrown out by the underground stream—in other words the position of the reaction bands.

Notes and Documents. Activities in various countries are recorded. In *Germany* a Congress was held at the end of September, 1950, at Rothenburg-ob-der-Tauber at which 80 members were present. Eight lectures were given which were attended by more than 200 people.

Luxembourg. Monsieur H. Meier (B.S.D.) tells how on the advice of a Government geologist, Dr. Lucius, a well had been made at Wasserbillig where there was a serious shortage of water, but when water was found it was undrinkable. Having located water on a map

he offered his services gratuitously to the burgermaster, with the result that excellent water was found at a depth of little more than 40 metres.

Switzerland. There is a note on an apparatus called Christrahl, invented by M. Jean Christen. It is meant to neutralise differences of potential due to excessive ionisation of either a positive or negative kind which are the fundamental cause of many human maladies.

Entre Colonels. There are replies to three out of four fundamental questions on dowsing by Colonel Bell which were printed in ***R.I.R.***, No. 21, p. 36, kindly given by Lieut.-Clonenl Stevelinck. He also gives an asnwer to the inquiry made by Lieut.-Colonel Hennessey in ***B.S.D.J.*** IX, 67, p. 45, as to why his reactions were stronger on the ground on which vegetation had been burnt, than they were before the fire took place. Very briefly the answer is that vegetation produces a state of energy which opposes the energy emitted by the dowser so that when the vegetation no longer exists the dowser's energy has greater effect.

France. M. Nicolas tells how he was discussing the relation between cancer and subterrnaean water with a doctor on whose land he had been prospecting, the doctor asked him to examine his lodging. On doing so M. Nicolas discovered a stream running towards the lodging two or three metres from the front. The doctor then told him that two occupants had at different times died of cancer in it.

At Granville the water supply system had deteriorated and holes had been dug in six or seven places to find the leaks, but without success. Dr. Regnault however located three trickles of water emanating from a point, and all was put right.

A letter from M. J. Chastellain, Mayor of Rouen, testifies to the success of M. Brivet in locating on behalf of the Highway authorities two subterranean streams in the rue des Juifs.

No. 25

This number starts with an account of the result of the first competition in distant prospection.

A watch had been taken from Paris to Fontainebleau by National Road No. 7 on December 1st, 1931, and deposited at a certain spot, C, on October 1st, 1950.

In considering the answers, points, 20 in all, were allotted on the following basis: location of watch 10, condition 5, route followed 3, position with regard to the ground 2. There were 52 competitors, of whom 11 gave the correct location. Of the two best, M. Hubinot lost one point by giving the height above ground as 30 cm. instead of 70, whilst M. Olive Noel lost two points for locating the watch slightly to the west of C and gave the height as 69 cm. above ground. In all other respects the answers of both were accurate. Six others were correct in giving the route taken.

There follows an obituary notice about Charles Voillaume, who died on November 15th, 1950, in his eightieth year. An old artillery officer, who became an engineer, he was a celebrated radiesthetist and the author of several books on the subject, notably *Essai sur les Rayonnements de l' Homme et des Etres Vivants.*

Les Radiations et leur Application en Agronomie, by Georges Carrère. The author admits that he has never handled a pendulum

and though he recognises the physical basis of Radiesthesia and the value of the radiesthetist's indications when physical apparatus are not available, he nevertheless prefers to retain his position as an orthodox scientist. In justification of this attitude he describes experiments in energising seeds by an instrument the construction of which was prompted by the theories of his friend, the late S. Bignand. The effect of the germinative energy produced by this instrument (which is not described) on radishes, turnips, lucerne, &c., is very remarkable.

Un Jardin exceptionel par la Radiesthésie. Lt.-Colonel Stevelinck describes a method of making water radioactive, involving a form of energy at present unclassified. Seeds treated with this water will produce plants of remarkable size. For instance in 1949 the author grew tomato plants which attained a height of 3.15 metre and bore excellent fruit in three times the usual quantity.

Bulletin Autonome de Radiesthésie humaine, No. 6. Maurice le Gall deals with the general subject of dowsing on maps and plans. He very properly scouts the idea of a plan or map emitting radiations whereby the dowser can acquire knowledge of a place unknown to him, but regards it as an aid to a suitable mental attitude. He might have mentioned that a plan is not in the least necessary as has been shown in a most decisive manner by Henry Gross in the U.S.A., by J. H. Bennett in Ireland and no doubt by many others who can get all the information required merely by obtaining answers to questions regarding locality, &c., through some conventional movement of the dowsing instrument.

The author's own method of working on a plan is to move a straight-edge, e.g., a ruler, over the plan and note its alignment when his pendulum takes up the movement agreed on by convention ; then to move a pencil along the line until the appropriate movement again takes place, thereby denoting the point required.

Dr. A. Valmyre gives a short description of a complete cure by radiesthetic methods of a case of alopecia (baldness) in a girl of 14 due to hereditary syphilis. Four photographs show the original condition in January, 1950, and intermediate stages till January, 1951, when the cure was complete.

Le Mystère des Pyramides, by G. Blahovsky. The author shows how the pyramidal shape causes disturbance in the Earth's magnetic field as revealed by a compass when placed at various points inside and outside pyramids of sheet iron and of cardboard. The readings show that at a certain distance from the north edge there is a considerable drop in the magnetic force. A.H.B.

LA RADIESTHESIE POUR TOUS

JUNE

p. 163. A meeting in the Saint-Marcel quarter of Marseilles on March 18th, convened by M. Roger Caro, was attended by a number of persons of note, including police officers, when radiesthetic tests were carried out to the satisfaction of all present.

p. 169. This is an article by P. W. Hook, translated from the English, in which he describes a simple method of choosing one or more of 12 remedies to suit a patient. He places the remedies in a circle round a witness of the patient at a radius of about 15 c.m. on a disk of plate glass, the witness being placed in the centre on a watch

glass. Surprisingly enough, the author came to the conclusion that the 12 Schussler biochemic salts were so efficient that they sufficed (without other remedies) for the ordinary run of patients' needs, and he gives cases in confirmation of this.

p. 171. F. Servranx describes simple radiesthetic experiments which can be carried out, utilising the influence of diagrams drawn on a sheet of paper. Contrary to some radiesthetists, he believes that the influence of the written word in radiesthesia has a physical basis. A word sample, he says, becomes the equal of a physical sample, but only after it has been energised, which can be carried out with the help of geometrical forms drawn on paper.

p. 177. Orthodox science viewpoints. "Electron" discusses several aspects of science interesting to radiesthetists. Through experiments with the isotopes of hydrogen it has been found that a glass of water, when drunk, is only completely eliminated from the system after about a month. This fact enables us to understand the action and value of homoeopathic remedies which, in their liquid form, behave like pure water, their action being prolonged in the body over a fair period of time. Most allopathic remedies, it is stated, do not behave in this way, the sulphonamides and most of the antibiotics being eliminated in several hours. In another section the author states that clinical findings of such diseases like tuberculosis, typhoid, fibroma, &c., may be due (according to Reilly and his collabarators) to the impaired action of the sympathetic nervous system and an infection of its own ganglions, causing degeneration in the lungs, intestines, kidneys, &c., as a secondary effect.

p. 179. Henri Souty writes on radiesthesia and occultism. He emphasises the importance of a word, or name, in magic. The foundation of Egyptian magic, he says, was the power of the word. The name, he thinks, contains the personality of the man.

p. 185. Pierre Bories recalls experiments on desiccation carried out with apparatus of pyramidal form.

p. 187. This is the seventh article by W. Herrinckx on "Initiation to Medical Radiesthesia."

JULY

p. 193. Radiation from figures. R. Jacquet maintains that diagrams drawn on paper can have the property of emitting strong radiations, and that a sick persons subjected to the radiative action of a diagram, carefully chosen by radiesthetic methods, will experience a progressive improvement. The author reproduces two drawings, or diagrams, which he considers of special significance, one of which consists of a broad white spiral on a black background. With photographs of a sick person, it is claimed that these diagrams can be employed to improve the health of that person, even when at a considerable distance away.

p. 197. From the known to the unknown. This article, written for beginners, stresses the importance of training exercises whereby tests are made to ascertain certain facts, the answers already being known. For instance, it is good practice to place in a match-box a certain number of matches, and then to check the number with the pendulum. You will then become familiar with your pendulum reactions, and will find that you can later ascertain the number of matches by pendulum without first counting them. *L.R.P.T.*

p. 200. Charles François describes a simple apparatus designed to assist in outside prospection. It consists essentially of an aluminium parabolic reflector connected by a mild steel connection to an electromagnet, a battery, a 2-microfarad condenser and a make-and-break. Used with a pendulum, the apparatus can be employed for finding buried objects, metals, &c., and constructed in a different form, it can be used for map dowsing.

p. 203. Pierre Bories describes the radiesthetic achievements of Louis Merle, who was employed for many years in a railway workshop at Capdenac. Louis Merle became expert in water divining, and he has had up to to-day 500 confirmed successes.

p. 208. This article comprises the third report of the Scientific Commission of the Experimental Radiesthetic Section, set up under the auspices of the Fédération Belgo-Luxembourgeoise des Cercles de Radiesthésie, and it deals with the identification by pendulum of various metals. The results of some 1,500 experiments leave hardly any other option (the report states) than to accept the thesis that matter—magnets and metals in particular—exercises on the hand and arm of the pendulist an incontestable physical action, which is transmitted to the central nervous system. This interprets the influence and sends it back in the form of a reflex muscular action to the pendulum hand. The report, which is of considerable length, is presented by the president of the Commission of Control, M. L. Keffler, D.Sc., M.Sc., civil engineer.

p. 219. The acquittal by the Court of Appeal in Brussels of M. Carlier, a well-known radiesthetist of Mons, is reported. He had been convicted of practising medicine illegally. M. Carlier uses neither rod nor pendulum, but the laying on of hands. When the patient cannot attend the healer personally, he is sent certain chemical products, which M. Carlier considers inert and which he has previously impregnated with his own vital force. M. Carlier has also impregnated filter paper which the patient carries about with him, placed over the affected part.

p. 221. A simple apparatus for out-of-door prospection is described by C. Mithieux, an amateur radiesthetist. V.D.W.

ZEITSCHRIFT FUR RADIÄSTHESIE

No. 3, No. 2, March-April, 1951

This number begins with a short obituary tribute, by Dr. A. Mannlicher, of Salzburg, to the memory of Ludwig Straniak, who died on the 16th January, 1951, in his 73rd year. The writer says that Straniak not only left a record of untiring work on dowsing, but also a mass of material in manuscript which he had hoped to publish as a book.

Dr. Wüst contributes an article on "the relationship of microseismology to the problem of rod and pendulum." While working with J. Wimmer he had first noticed that Wimmer registered reactions in his laboratory which were later found to have coincided with the working of a ventilator in the neighbourhood of the laboratory. These reactions ceased with the stopping of the ventilator. In subsequent experiments he observed similar reactions caused by similar disturbances, and on looking up the subject he found a number of references to such reactions produced by artificial phenomena, such as the

approach of Zeppelins, the travelling of trucks in mines, even when hundreds of feet below the observer, and the like. Again, from different parts of the world came evidence of animal (including human) reactions to the minute earth movements occurring before larger cataclysms.

He compares such reactions with those of the delicate instruments, now employed in seismology, which are capable of registering the effects of storms, and like disturbances, at the distance of hundreds of miles. He discusses the extent to which different types of earth constitutents and structure may affect the transmission of such shocks, and he compares the dowser's skill with the sensitivity of extremely sensitive microphones which can detect minute leaks in gas or water mains. Besides electrical and magnetic changes, therefore, he thinks that micro-seismic influences must be considered in their effect on the dowser.

Dr. Ernst Hartmann, and Eric Mayr, an engineer, publish their views on the problem of " earth rays." The editor indicates that he thinks these views may be controversial, but publishes them for criticism.

The authors assume that the radiations influencing dowsers may be divided into four types, distinguished by them as a, b, c and d. Types a and c, they say, are transverse waves of a sine type, and are detectable by most sensitives, both of rod and pendulum. They can be screened by rubber, and also probably by other substances. The radiation b, which they say is transmitted lengthwise and has strong physiological action, is according to them difficult to demonstrate, as it has probably been detected, up to the present, by themselves. They compare type d with Reichenbach's " Od."

The article will probably stimulate discussion in future numbers.

Julie Kniese contributes an article largely upon the determination of sex by the pendulum, giving accounts of her methods in the determination of sex in the case of an embryo, and attempting to explain the causes of error in such detection. She also exhibits photographs of her hand and of a hen's egg, both showing what she describes as an " Odic glow."

An anonymous writer, signing himself —yé, writes a vigorous reply to a certain Dr. Heck, an official geologist in Schleswig-Holstein who seems not to be content with decrying the dowsers' skill, but has even condemned them in terms of which the following extract is a sample : " Statistics over the range of dowsing lead us to the already mentioned 99 per cent. failures," following this with a suggestion that the question is one for judicial, and not scientific, authorities to investigate.

After this, and further attacks on the reliability of dowsers Dr. Heck goes on to say that in any case one could for geological reasons always rely on 95 per cent. successes from sinkings in Schleswig-Holstein. The author of the short article rather pertinently deduces that if it be true that 95 per cent. successes can be relied on, the dowsers must really be rather clever to succeed in getting 99 per cent. failures.

The rest of the number is taken up in the main with news of the different sections of the *Verband*, including an account from the professional division (Fachschaft) of courses devised to give to members not only instruction in practical dowsing, but also an elementary idea of the elementary facts of the science of the Earth's crust.

C.S.T.

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